



Search for

Display as

☐ 1: D64006 **Synechocystis sp. PCC 6803** PubMed, Protein, Related Sequences, Taxonomy, LinkOut
DNA, complete genome,
section:25/27, 3138604-3270709

LOCUS SYCSLLH 132106 bp DNA BCT 05-JUL-2001
 DEFINITION *Synechocystis* sp. PCC 6803 DNA, complete genome, section:25/27, 3138604-3270709.
 ACCESSION D64006 AB001339 BA000022
 VERSION D64006.2 GI:14595120
 KEYWORDS
 SOURCE *Synechocystis* sp. PCC 6803 (strain:PCC6803) DNA.
 ORGANISM *Synechocystis* sp. PCC 6803
 Bacteria; Cyanobacteria; Chroococcales; *Synechocystis*.
 REFERENCE 1 (bases 1 to 132106)
 AUTHORS Kaneko,T., Tanaka,A., Sato,S., Kotani,H., Sazuka,T., Miyajima,N., Sugiura,M. and Tabata,S.
 TITLE Sequence analysis of the genome of the unicellular cyanobacterium *Synechocystis* sp. strain PCC6803. I. Sequence features in the 1 Mb region from map positions 64% to 92% of the genome
 JOURNAL DNA Res. 2 (4), 153-166 (1995)
 MEDLINE 96127522
 REFERENCE 2 (bases 1 to 132106)
 AUTHORS Kaneko,T., Sato,S., Kotani,H., Tanaka,A., Asamizu,E., Nakamura,Y., Miyajima,N., Hirose,M., Sugiura,M., Sasamoto,S., Kimura,T., Hosouchi,T., Matsuno,A., Muraki,A., Nakazaki,N., Naruo,K., Okumura,S., Shimpo,S., Takeuchi,C., Wada,T., Watanabe,A., Yamada,M., Yasuda,M. and Tabata,S.
 TITLE Sequence analysis of the genome of the unicellular cyanobacterium *Synechocystis* sp. strain PCC6803. II. Sequence determination of the entire genome and assignment of potential protein-coding regions
 JOURNAL DNA Res. 3 (3), 109-136 (1996)
 MEDLINE 97061201
 REFERENCE 3 (bases 1 to 132106)
 AUTHORS Tabata,S.
 TITLE Direct Submission
 JOURNAL Submitted (30-AUG-1995) Satoshi Tabata, Kazusa DNA Research Institute, The First Laboratory for Plant Gene Research; Yana 1532-3, Kisarazu, Chiba 292-0812, Japan
 (E-mail:tabata@kazusa.or.jp, URL:http://www.kazusa.or.jp/cyano/, Tel:81-438-52-3933(ex.2330), Fax:81-438-52-3934)
 COMMENT On Jul 3, 2001 this sequence version replaced gi:1001291.
 Potential protein coding regions were assigned on the basis of similarity search of the ORFs and GeneMark analysis.
 FEATURES
 source 1..132106
 /organism="*Synechocystis* sp. PCC 6803"
 /strain="PCC6803"
 /db_xref="taxon:1148"
 /note="synonym:*Synechocystis* PCC6803"
 misc_feature 1
 /gene="s110737"
 /note="old_protein_id=BAA10778.1
 partial CDS location, complete CDS is reported in Acc# D64005"
 gene 1
 /gene="s110737"
 gene complement(314..1252)
 /gene="s110048"
 CDS complement(314..1252)

gene

CDS

gene

CDS

gene

CDS

gene

CDS

```
22="s110043"
/note="ORF_ID:s110043
unknown protein"
/codon_start=1
/transl_table=11
/protein_id="BAA10779.1"
/db_xref="GI:1001292"
/translation="MFTTTSFPDFDSAAQATLTLYLHORMGLSLWMITRTEVDNWIVLQ
AQDNGYGVKRGDVFWHPDSFCSRMRVGECPHIAQSNLVEAYRNAPIAQQVDIGAYVG
VPITYGNGLSFGTLCAIDPEIQPDSLDELPLVELIAQLLSTILDFFLKAETASRREE
YQQLLKERDGTGTFYSLSGWEKLLASEEIRCQKFGFPVSVIIVEVEAAEPKGEPIIND
LILQRAAKI IKTVCRRQDDFCARIGEREFAILCIECHISQADFIRERLALGFEQKITA
DIGIGERSPEKGLLDAMETAKSAAHEQKKFRVKTEG"
complement(1442..1753)
/gene="s110047"
complement(1442..1753)
/gene="s110047"
/note="ORF_ID:s110047
unknown protein"
/codon_start=1
/transl_table=11
/protein_id="BAA10780.1"
/db_xref="GI:1001293"
/translation="MRLQQAPHPCMQYQVAMAGLLLHITLCIFMTASPGDETNPALID
IGFIILAYVESSQQFLTGEIMELLAALNLEPIFQLTFLGLIVLAGPAVVFVLAFRGGD
L"
1704..2075
/gene="slr0022"
1704..2075
/gene="slr0022"
/note="ORF_ID:slr0022
unknown protein"
/codon_start=1
/transl_table=11
/protein_id="BAA10781.1"
/db_xref="GI:1001294"
/translation="MATWYCMQCGACCNLTPEDRPELAEYLAPEELTLYHSLVGADG
WCVNYNHGDRLCQIYEDRPSFCRVKPDNFARMFGIAPAEFDEFASHCCCEEQIEGVYGP
RSGELKSYRQGLPKFEVDSHF"
complement(2110..4272)
/gene="sps"
complement(2110..4272)
/gene="sps"
/note="ORF_ID:s110045"
/codon_start=1
/transl_table=11
/product="sucrose phosphate synthase"
/protein_id="BAA10782.1"
/db_xref="GI:1001295"
/translation="MSYSSKYILLISVHGLIRGENLELGRDADTGGQTKYVLELALAL
VKNPQVARVDLLTRLIKDPKVDADYAQPRELIGDRAQIVRIECGPPEYIAKEMLWDYL
DNFADHALDYLKEQPELPDVIHSHYADAGYVGTRLSHQLGIPLVHTGHSLGRSKRTRL
LLSGIKADEIESRYNMARRINAEETLGSAARVITSTHQEIAEQYQYDYYQPDQMLV
IPPGTDLEKFYPPKGNWETPIVQELQRFRLRHPKPIILALSRPDPRKNIHKLIAAYG
QSPQLQAQANLVIVAGNRDDITDLDQGFREVLTDLLLTIDRYDLYGKVAYPKQNQAED
VYALFRLTALSQGVFINPALTEPFGLTLIEAAACGVPIVATEDGGPVDIIKNCQNGYL
INPLDEVDIADKLLKVLNNDKQWQFLSESGLEGVKRHSWPSHVESYLEAINALTQQT
SVLKRSCLKRRRTLYNGALVTSLDQNLGALQGGLPGDRQTLDELLEVLYQHRKNVG
FCIATGRRRLDSVLKILREYRIPQPDMLITSMGTEIYSSPDLPDQSWRNHIDYLWNRN
AIVRILGELPGLALQPKKEELSAYKISYFYDAAIAPNLEEIRQLLHKGEQTVNTIISFG
QFLDILPIRASKGYAVRWLSQOWNIPLEHVFTAGGSGADEMMRGNTLSVVVANRHHE
ELSNLGEIEPIYFSEKRYAAGILDGLAHYRFFELLDPV"
4354..4968
/gene="slr0023"
4354..4968
/gene="slr0023"
/note="ORF_ID:slr0023
unknown protein"
/codon_start=1
/transl_table=11
/protein_id="BAA10783.1"
```

225

gene

CDS

gene

CDS

gene

```

/db_xref="GI:1001096"
/translation="MPL...MPDIFWNVNVENTVYVNWQ...LCEIQF...
QQQIEQHLPGLAAIAF...DNIAVLRVLEVSNGCLQWAFRRQDINCLSV...
VIGFIKVKKIACPSGKLAFTPAIEQLIEQTTQLYRQAFKQNNOTAKQET...
IAYGGDRLNQAQDLVEQEFSPLLTPHFVLRGKNYIAPYLQAITP"
complement(5093..5578)
/gene="s110044"
complement(5093..5578)
/gene="s110044"
/note="ORF_ID:s110044
unknown protein"
/codon_start=1
/transl_table=11
/protein_id="BAA10784.1"
/db_xref="GI:1001297"
/translation="MALHSSSVDSASVQVGQPSVRPEKFLFLFAVGKLNALPIALVVKI
LPHGPAHGSQLSATGLVNLENRSVTMVDLYRRFFGVGPPTTSTKQYFILTKNRSGEH
FCLLVNNAPTLLDVLPRQIRQLPDSYRQNDTLQSASHVMVVEEKSEKLTVFLLDPDLL
L"
complement(5610..9818)
/gene="s110043"
complement(5610..9818)
/gene="s110043"
/note="ORF_ID:s110043"
/codon_start=1
/transl_table=11
/product="CheA like protein"
/protein_id="BAA10785.1"
/db_xref="GI:1001298"
/translation="MLNSDIRDHAYQFFIEEAPELLSVIEMLLELRGERTPAQIHGI
MRAAHSIKGAASVQLPAIEELAHRLIEDIFKALYSDAVVDDRLEGMLLEGFDYLKQA
LTTQIETGQLEHTEVLVQGLPVIAAIEEQLEHGLAAGEQFLPSSADLGVDIVASLFEV
DVAQGLAEIGEALAGDDEERLRGTLAAQTEIFAGLAEILNLPGFKEITDLVAQGLDNP
GLSAGLEALAVAVENWQHSCGQVLEKGDQRQGGEPSEALLALVRGQGERDLAAIAGLEE
VFGGGEVGSSEFWGMDPELGDIPTAISTAEENVFAAWEETPTMTFPQPGEGDIPASDR
QPSLGPEN...NLEPAYRFFIEEAPTLLQEIETGLLTIGQDRSAAVVHGIMPAASHLKG
GAASVGLETIKHIAHRLIEDIFKALYSEEVVLDQTMETLLQGFDCLRNPLEQQIDQGY
YDPETAWSQAQGPILNLEQRLGVHLAAGEQFLPSSADLGVDDVASIFEVDIAGGMAAV
TEARQRGPEALREALTSQTEIFLGLAEILNLPGFQGICAAVHQALEANPEQVSTIANQ
ALADWQVATQQVLENGDRQRGGEASTELLALGQRLAAPAESRPQPTSAPARVLGGLFF
GDDEDELEEEPSPTTTPMTGSWQSQPEQQVSPILEQTTVEAETVESPPSLEDVFGGLT
ADELGKESLSPVAEVDVFDASLETLSLVQAVEEAFDSLPLATTPTATIPQAEVEAVAA
PAPPVERTHERMAPREQNANLSIRVDFQRLERMNNWVGELAINRNSLSLQNLQTLQT
AVGALGQRFGTFTQPMALKLRQLADQLAIRPEGEAMLRAQPRSQGWLEHNFDAEMDSY
GTLSAQLQEILEEMMQLEEAVDDVVLFPSRA...QTVDAQKQMLFSLRDELMNAEMLPGL
EILQRFPRLLRDMASKFNKPVQIKLHGTGVLDRLALEKLYDPLLHLNRNAFQHTIED
EGTRLAMGKPAWGTEIEVHAYHQGNQTIEMRDDGGGLNREKILRRAVERGLVTEEQGQ
RLTTEQIDNLIIEFNPVSTADQVSELSGRGVGLDVVRQQQLQALKGTIVVSSRPGRSTVF
SLRLPLTLTIAKLLVCLVGONQGAFTAIPSDSVAELMVPTATQIKTSGGQRFHLHWQ
ELTIPIYSLTQLLPYHCPLESEQQTSKLLTTVPQPDNWHPLPLVLLRLGQQYYALEVNR
VTEQELVIKPFSSLLPAPSYLYGATILADGTLPVVGALLLEWHWQKGTONTLAMAQD
GVEPLPTPGRRAKTILVVDSSAALRRTLAFTLERSGYRVMQAKDGQEAALKTLAQAGEV
DLIICDVEMPNLNGFEFLGQRRRNPDLLKIPVAMLTSRGSEKHRQLAKTLGANAYFTK
PYIEQQFLGAVQELLATGLLSVSS"
complement(9835..10326)
/gene="tar"
complement(9835..10326)
/gene="tar"
/note="ORF_ID:s110042
gene:tar or chem"
/codon_start=1
/transl_table=11
/product="methyl-accepting chemotaxis protein II"
/protein_id="BAA10786.1"
/db_xref="GI:1001299"
/translation="MSTIASYQPPKQDTAMLSGQISQQAESLQTMRSVRATMATTG
EQLEKLDSSSTQEIAKAINLIRQFAAQTHLLALKASIEAARAGEEGRGFSVIADSVRS
AAQSAEATAAMEALIVTIQSQAARELTGSIRESNQQLNGHHQQLLETNQYWHQLAETLL
SNP"
complement(10372..13374)
/gene="s110041"

```

CDS

complement(13636..14184)

/gene="sll0040"

/note="ORF_ID:sll0040"

/codon_start=1

/transl_table=11

/product="tsr or; CheD"

/protein_id="BAA10787.2"

/db_xref="GI:14595121"

translation="MTQNPSSDRRPDTAQSVANGETLDGALFTGLTDTAAQDESSET
SASFATIDGEDKSEVGDAWDWFSKGKTDINGDEADRGIQADTQAKTLVSLNLTTEP
EIDGAEFMAEAFIAENTAVEDVSPNPNPAIDTDALAALTQSAVELTPPPPINLPKVEL
PPMQPLAPLMAIADPDNLSPMSTS IQAPTQSGGLSLRNKAVLIALLIGLIPAGVIGGL
NLSSVDRLPVPQTEQQVKDSTTKQIRDQILIGLLVTAVGAAFVAYWMVGENTKAQTAL
ALKAKHSHRNLDQPLAVAGDELAIDQTI DALSAQVEKLRHQDLSLKQAEELLTELSR
ANLSDIDEIQGVQKNLDQARALFGCERLVFYYHPRYQPEAMVVQALDLTQGLIDSK
DPHPWGQEDMPSQIVAINDTSGASISNPHRQWLEQHVKASLTVPLHRDNYPLGLLMA
HHCQRPHQWEMRERQFLQQLTEELQTTLDNRANLIQERNESAQQAQILKELTLKISAAI
NSEQVFDIAAQEIRLALKADRVIVYRFDATWAGTVIVESVAEGYPKALGATIADPCFA
DSYVEKYRSGRIQATRDIYNAGLTPCHIGQLKPFVKANLVAPINYKGNLLGLLIAHQ
CSGPRDWHQNEIDLFGQLTVQVGLALERSDLLAQQKIAEVEQRQRMREKMQKRALELLM
EVDPVSRGDLTIRAHVTEDEIGTIADSYNATIESLRRIVTQVQTAASQFTETDTNEV
AVRQLAQGANRQALDVAEALERLQAMNKS IQAVAENAAQAESAVQRATQTVDQGEDAM
NRTVDGIVAIRETVAATAKQVKRLGESSQKISKVVNLIQS FADQTNLLALNAAIEAAH
AGEEGRGFVAVADEVRSLARQSAEATAEIAQLVATIQAETNEVVNAMEAGTEQVVVGT
KLVEETRSLNQITAVSAQISGLVEAITSAAIEQSQTSESVTQTMALVAQIADKNSSE
ASGVSATFKELLAVAQSLQEAVKQFKVQ"

gene

complement(13636..14184)

/gene="sll0040"

CDS

complement(13636..14184)

/gene="sll0040"

/note="ORF_ID:sll0040"

unknown protein"

/codon_start=1

/transl_table=11

/protein_id="BAA10788.1"

/db_xref="GI:1001301"

translation="MLGDIQVPRQQFLQFTLEPDTNLILPLFQLTEILTVPLGQITPI
PHMPSWTMGVHNWRGDVLWVIDFGAFLGLTSWHLQSGSRTNYRVII LNGGVPFDLDP
QRRRSPGQRNQMLGLVVTEVKDITWCETDQIQSPPAASIGSDLAPYVRGFWVSPPGVM
YVVLDAQAIVGRLMTTPRAASS"

gene

complement(14352..14711)

/gene="sll0039"

CDS

complement(14352..14711)

/gene="sll0039"

/note="ORF_ID:sll0039"

/codon_start=1

/transl_table=11

/product="CheY subfamily"

/protein_id="BAA10789.1"

/db_xref="GI:1001302"

translation="MGSALVIDDSSTERSIISDFCQKLGINVTTAISGEEALEKLSQA
VPDVIILDIVLPGRSGFEICRELKDKDRTKSIPILCSTKATDMDKFWGKRQGADAYI
TKPIDQEEFNTVIKQFI"

gene

complement(14849..16057)

/gene="sll0038"

CDS

complement(14849..16057)

/gene="sll0038"

/note="ORF_ID:sll0038"

/codon_start=1

/transl_table=11

/product="PatA subfamily"

/protein_id="BAA10790.1"

/db_xref="GI:1001303"

translation="MTAPTSSHSVPIQEFASRQASFFDGLKQPRFSGQLILSSATG
EKWSFYLYMGRIMYATGGIHSVRRWRRQIASYLPPIAANLASVQTDLASIDPQDLQIC
WEYQLLCHWVAQQKVTREQAARLIRATVVEVLFDITQSMEVACDLRQDNLLSTRVLVI
DADQMIAESQQLWSKWQGAQIADRSPNAAPIIRQAEQLQQRTPQVYQTLKQLLDGNQ
SLRDLSSVRMKRDVLSVTTSLPYLQLGLVELIKIPDLPPPAPPVGRGVVQPDVPSGP
LIACVDDSP LICQTMEKILTTANYRFVGINDP LRAIAIILLARKPDILFDLVMPNANG
YEICGQLRKLSIFKSTPIVILT GNDGIVDRVRKMGVSTDFLSKPVNPDMLVLTIKKH
LHDQASLPAE"

gene 18307..18061
CDS
gene="slr0031"
18307..18061
/gene="slr0031"
/note="ORF_ID:slr0031
hypothetical protein"
/codon_start=1
/transl_table=11
/protein_id="BAA10791.1"
/db_xref="GI:1001304"
/translation="MLPTLPHLHYQVAMPTPQTHYFTVOLHIQGFTASVLELKFPVWT
PGSYLVREYERHLQDFQAQGLSNGEYLEHQKLGKAHWAIACGEEENIAISYRIYADEL
TVRTNHLDDYSHGFFTGAALFFYLPGHTRPLALTVPPEPAWAIATALPCFATDSTTG
AKTFYAQDFDFTLVDSPEVVGIRDIYAFETQGKEHHFVWGESNLNGEQLVDPTEKIIA
VEAGLPGNLPHYDHYWFIHLSNQGYGGLHKKDSCVLNDRFGFRDPEKYQFFLQLVAH
EFFHLWNIKRIPIALEKFDYDQENYTPSLWFSEGTTSYYDLLIPLRAEIVDRQTYLK
NLGKEITRYLKTGLRLVQPLAESSFDAWIKLYRRDANSQMSYYLKGELVTLMLDL
LIRERHQNRQSFDDVLRAMWQEFGRREEIGFTPEQLQAVISRVAQDLDLTFEFHTYLHTT
AELPLNDYLPQFGLVIKPMQEDLTPYLGIKVKSEAGQEKITFVAHSPAAMAGISPOQ
LLLAINGVRVGAEQLSLRLKDYQANDMIQLTVFHQDLLRTVDVVLASPAQANRYEVVPI
ADPSDSQLQNLAGWLGES"
gene 18157..19074
CDS
/gene="ilvE"
18157..19074
/gene="ilvE"
/note="ORF_ID:slr0032"
/codon_start=1
/transl_table=11
/product="branched-chain amino acid aminotransferase"
/protein_id="BAA10792.1"
/db_xref="GI:1001305"
/translation="MHKFLPIAYFEDKFVPFEDAKISVATHALHYGTAAFGGLRGIPD
PEDPGTILLFRLDRHGDRLSKSAKFLHYDISAEKIKEVIVDFVKKNQPKSFYIRPLV
YSSGLGIAPRLHNLEKDFLVYGLEMGDYLAADGVSCRISWYRQEDRSFPLRGKISAA
YITSALAKTEAVESGFDEAILMNSQGVCEATGMNFMVRNQGIVTPGNEQDILEGIT
RDSILTIAADLGIPTCQRPIDKSELMIADEVFLSGTAAKITPVKRIENFTLGGDRPIT
EKLRSVLTAVTENREPKYQDWVFKIPLNG"
gene 19131..19445
CDS
/gene="slr0033"
19131..19445
/gene="slr0033"
/note="ORF_ID:slr0033
unknown protein"
/codon_start=1
/transl_table=11
/protein_id="BAA10793.1"
/db_xref="GI:1001306"
/translation="MLDQSQVQKIAHLARLEITPEEESQFASQLSSILDYFDQNLPLP
TEGVEPTTRAIELSNIVRGDRQISWDGDNAATTPQALLDNAPEPEGDFFRVPRIMGGD
EA"
gene complement(19503..20513)
CDS
/gene="sll0037"
complement(19503..20513)
/gene="sll0037"
/note="ORF_ID:sll0037
unknown protein"
/codon_start=1
/transl_table=11
/protein_id="BAA10794.1"
/db_xref="GI:1001307"
/translation="MTLTSVPAPVSLFPELELPPLPYHRPLLMIGHGTRDEDGRQTF
DFVAQYQALDHSRPVIPCFLTEPNIQAGVQQCVDQGFEEISALPILLFAARHNKFD
VTNELDRSRQAHPQINFFYGRHFGITPAILDWLKARLNQLDSPEANPQIDRQDTVLL
FVGRGSSDPDANGDVYKMARMLWEGSGYQTVETCFIGISHPRLEEGFRRLYQPKRI
IVLPYFLFMGALVKKIFTITEEQRAFPEIEIQSLSEMGIQPELLALVREREIETQLG
QVAMNCEACKFRLAFKNQGHGHDHGHGHHGHGHDHGHSHGEWVDTYIEPTAYHEKIWO
AP"
gene complement(20747..22048)
CDS
/gene="sll0036"
complement(20747..22048)
/gene="sll0036"

/note="ORF_ID:sll0036
hypothetical protein"
/codon_start=1
/transl_table=11
/protein_id="BAA10795.1"
/db_xref="GI:1001308"
/translation="MAAHIALIAHDNKKDALVNFVQQHKSLSFSRYDLIATGQTGELWR
NKTGLAVDTVFSGPLGGDTQIATQIIDGTIAAVIFLIDPLYAQPEHPDIRTLRLCEV
YNVPLAINLATAKAVIKLLGKTKTGHLIFNPVAGQGNVERELDLIKEHLQSEINLKIT
FTSAEVNVTDAQEIVKRIKQANEQSDGEGDSFIIASGGDGTVSGVAAALVNTGIPLG
IIPRGTANAFSVALGIPTQIPGACQTINRGITKVVDALCNDIPMLLLAGVGFEEAMV
EKADRELKNNLGVMAIIFAGIQQAREQELFEAHIEIDSETTTMEASAITIANAAPPTS
VFAQGAGQVSFTDGLLDITVASSQTALQGLQVVTNLFTSALSKNPSDNENVLHLYGES
IKVTTSPQKIVVDGEIIGTTPVEVKCLPKSLNIFAPVENS"
22114..23283
gene
/gene="aspC"
CDS
22114..23283
/gene="aspC"
/note="ORF_ID:sllr0036
gene:aspC or aat"
/codon_start=1
/transl_table=11
/product="aspartate aminotransferase"
/protein_id="BAA10796.1"
/db_xref="GI:1001309"
/translation="MVMETAFSRMDLVQSPVIPVVGQWIVDSPGTISLGQGVAFYPPP
NEVAVAVRESLEQTPLHQYQPVAGIPSLISALTEKLRRDNDINLSSDAQVVTAGANM
GFLNAVLAITEVGDEIILNTPYYFNHEMAVRIAGCQPVLPVPTDDQYQLQLDLIAQAI
PRTRAVVTISPNNPTGAIYPEADLRAVNQLCQERGIYHIHDEAYDYFAYDQTPIFSPE
AMGDSGGHTISLVSFSKAYGMAGWRVGYMVIPLLELLAVKKIQDTNLCIPVVVSQYAA
LACLRVGKNYSAQFLPEMAACRQQLLETGLQLSDYCRLLVVPQGAFYCLLEVNSPLTDL
ELVKRLIDEFKVAVLPGSTFGVDSGCYLRIAYGALRQATASVAIARLEQGLKSIC"
gene
complement(23296..24072)
/gene="sll0034"
CDS
complement(23296..24072)
/gene="sll0034"
/note="ORF_ID:sll0034
unknown protein"
/codon_start=1
/transl_table=11
/protein_id="BAA10797.1"
/db_xref="GI:1001310"
/translation="MGKKPKSSFNVNQDDIPEVIRDNPAGSPQSQPLSPIPLKLIAG
LGIIILALLTLLALWPRPEPAPEVVTEPSPTPTATPIDNLLGHLPEEAPLGELKNIT
PDGRLKLRQAAADQFLMQRDAKAQGISLVPI SAFRTVTEQEQLFFDIKQQRNQEARQ
RAEVSAPPGYSEHHTGYAVDIGDGSQAATHLSASFAQTAFNWLQNNAAKYSFELSFP
PDNPQGIAYEPWHWRYVGDRQSLELFLYKARNLPQKNENN"
gene
complement(24135..25640)
/gene="sll0033"
CDS
complement(24135..25640)
/gene="sll0033"
/note="ORF_ID:sll0033
unknown protein"
/codon_start=1
/transl_table=11
/protein_id="BAA10798.1"
/db_xref="GI:1001311"
/translation="MTVSPSYDAIVIGSGIGGLVTATQLVSKGLKVLVRLERYLIPGGS
AGYFEREGYRFDVGASMIFFGDRGTTNLLTRALAAVGQALETLPDPVQIHYHLPGG
DPKVHREYEAFLELIAKFPQEAQGIIRRFYDECWQVFNCINTMELLSLEEPRLMRV
FQHPGACGLGLVKYLPQNVGDIARRHIQDPDLLKFIDMECYCWSVVPADLTPMINAGM
FSDRHYGGINYPKGGVGQIAESLVAGLEKFGGKIRYGARVTKIIQENNQAIQVELANG
EKIYGRRIVSNAWRDFTGALTGDQPLPGKEKRWRNRNYQSPSFLSLHLGVEADLLPE
GTECHHILLEDWDDLEKEQGTIFVSIPTLLDPSLAPDGYHIHTFTPSWLESWQNLSP
QEYEAKEADSGKLIDRLEAIFPGLDRALDYMEIGTPRSHRRFLGRQNGTYGPIPRRR
LPGLLPMPFNRTAIPGLYCVGDSTFPQGGLNAVAFSGFACAHRLAVDLGVR"
gene
complement(25801..26988)
/gene="sll0031"
CDS
complement(25801..26988)
/gene="sll0031"
/note="ORF_ID:sll0031

unknown protein"
/codon_start=1
/transl_table=11
/protein_id="BAA10299.1"
/db_xref="GI:1001312"
/translation="MTSSEISLISGKTDNFPQGHQYHGPRQSLERGRWVKLICGASYQD
LTAIRNLVLVYTLAGVDCIDLAADPAVVRVAQEGIKVALSLANSSHYEVETFDYSIQF
PWLMSVSLNDGEDPHERKAQFDPQKCPDPCPRPCAQVCPAWAITSDADEVVPTGVAAEH
CYGCGRCLPICQGIITTYSHQATVTSVLPWLELGQIAALEIHTQVGHEERFQQLWRS
LAPVLTQLQAIASCPYHAEAVEYLQTI SGWLGPLAMPTIWQTDGRPMSGDIGRGTTH
LCLHYADQVLQSSLSGFVQLAGGTNCHTITKLSSQDFSVHQSKRMVNGVAFGSCARTL
IAPVLQAAEARQQNPLAPLHLEDYPDLLQQAIALAQLVQPKHERRTFSENVSNIDN
NLQ"
gene 27447..27845
/gene="slr0038"
CDS 27447..27845
/gene="slr0038"
/note="ORF_ID:slr0038"
unknown protein"
/codon_start=1
/transl_table=11
/protein_id="BAA10800.1"
/db_xref="GI:1001313"
/translation="MSSTAISQLQPADKREVIVYQPYYPDKNKQKLLPLALALYQLGQ
VEGARRIEGGENLSFVATWVFSRLPSELTRCRMQFDGQADLSYEMTVLNSEFMDYLIC
LIAGYEESKNIDFPQNFYRKLLRLDDVSTL"
gene 28004..29077
/gene="slr0039"
CDS 28004..29077
/gene="slr0039"
/note="ORF_ID:slr0039"
unknown protein"
/codon_start=1
/transl_table=11
/protein_id="BAA10801.1"
/db_xref="GI:1001314"
/translation="MANSPQCLLVGSLEPYSGKSGIILGLARLLQQQGMATAYGKPIG
TAMNKAAAALAEADIEFISQSLELAPAQVRKPLVFLDEKTI TRP.LQGQDQTNVAALE
ASIQGLTADLVLEPGNLWEGSLFGLSFSELAAKINAAVLVGRYHSPVVDGLLKA
RQTLGDSLKGVVINDIPLALPETKDLVKPFLESHGIAVLGLLADRLLRVSVRELA
HQLNAKVLCSSEHLDLMVESLTIGAMVNSALEYFRQGENKAVVTGGDRDLDQLAALE
TSTSCILITGHAGPQPLIISRAQDLEIPILSVDDQDTLTTVEIVDQAFGNVRLQEPVKV
QCIQQLIATHFDLQAFQEI MAKG"
gene complement(29284..30198)
/gene="cmpR"
CDS complement(29284..30198)
/gene="cmpR"
/function="transcription regulator required for expression
of the cmp operon"
/note="ORF_ID:slr0030"
/codon_start=1
/transl_table=11
/product="CmpR"
/protein_id="BAA10802.1"
/db_xref="GI:1001315"
/translation="MKNATLHQFEVFAAIARTGSFTKAAEELFLTQPTVSQQMKQLTK
AIGVPLYEQIGRKIYLTEAGQAVLDASKNITSCLDQLQEVIA DLQGLKKGNRLATIT
TGKYFVPRLLGEFRQQYPGISISLQIGNRQQILERLANNLDDLYFLGKPPSNLDINIR
HFLENPLVVIASRQHPLVKEKKISLERLVNEPLIMRESGSGTRMAVEEFFSENRLKMN
VEMEISSNEAIKQAVYGGLGISILSLYSLALEGNGPLAVLDVEGFPLQKHWHYIIYQK
SKQLSIVAQTFLDYLFADHDEAVSIAQIF"
gene 30451..31809
/gene="cmpA"
CDS 30451..31809
/gene="cmpA"
/note="ORF_ID:slr0040"
/codon_start=1
/transl_table=11
/product="bicarbonate transporter"
/protein_id="BAA10803.1"
/db_xref="GI:1001316"

translation="MGSENNRRKFLTSAATATGA...LKGCAGNPPDPNAASTGTNPST
QAAGDISPENMPETANIKLGYIPIVEAAPLIIAQENKGFPAKYGMTGVEVEKIANWASA
RDNWTIGSQGGGIDGGQWQMPMPHLITEGIIITNGNKVPMYVLAQLITQGNIGAVAPMH
EGKGVNLDITKAADYIKGFNKNTNGRKFKAAHTFPNVNQDFWIRYWFAGGVDPTDID
LLAVPPAETVQGMNRNGTMDAFSTGDPWPYRIVTENIGYMAGLTAQIWPYPHPEEYLAI
ADWVDKXPKATKALLKGIMEAQQWIDDPKXNRPEVVQIVSGRNYFNVPPTILESPPKQ
YTMGDGQPAIDDFQKGPLYWKDGIGNVSYPYKSHDLWFLTESIRWGFHKNAIPDLDTA
QKIIDKVNREDLWREAATEAGFTADIPSSTSRGVETTFDGTITDPANPSAYLQSLAIK
KV"

gene 31872..32714
/gene="cmpB"

CDS 31872..32714
/gene="cmpB"
/note="ORF_ID:slr0041"
/codon_start=1
/transl_table=11
/product="unknown protein"
/protein_id="BAA10804.1"
/db_xref="GI:1001317"
translation="MTTISQRKNRAAGANPLQKFWRKRRGDILPPIFGILGFLLLWQ
LISSAGLIKLPSSSLWTDPRTRTLLMYPFYDQGGLDKGLFWQTLASLGRVAQGYSLA
AIVGISTGILVGTQPLLDKALDPIFQFLRMVAPLAWVPIALVALQQNPAAIFVIFIT
SVWPILINTTEGVKQIPQDYINVRKVLRLSPQKFFFKILIPALPYIFTGLRIAIGLA
WLAIIAAEIVMSGIVGIGFFIWDAYQQNYISEIILAVFYIGAVGLLLDRGIAYLQKLI
APGQ"

gene 32825..34555
/gene="slr0042"

CDS 32825..34555
/gene="slr0042"
/note="ORF_ID:slr0042"
unknown protein
/codon_start=1
/transl_table=11
/protein_id="BAA10805.1"
/db_xref="GI:1001318"
translation="MKQYRFTWLAGFATVTSLSLTFPGSAGAQMLYEDVDPMVITPVQE
LTTLLDQPMGQVTSVSELRDVQPTDWAYEALKSLVERYGCIVGYPDRTRFRGDRALS
EFAAGLNACMNMVERLIQENVAVIRADIDKLQRLAREFEAEALALGARVDNLETRTAY
LEDNQFSTTTKLNGEVIFSI SGATGGEPDSNAQIVFNDVRVRLNLTTSFTGKDALITG
LQAYNFTAGKPITGTGSVAETLFPNDASILGEGMTSFNYEPQFAGFNPQNLPSCGNN
SVCLYKLLYVTPVADNFTVFVGPKAETDAFPTIVPFASEGQGTLSRAFAINPVLRS
GGTTETGLASAAGFIYKPNVDVDRALYGSVNAAIPQNEGFPPTPLGAGLFNGSFVAA
TQLTLYPTENLDLGFNYAYSYHQLNLTGLTGLTGAAGTLGGLPLTTPVNVSVGATLT
WRINSSYFTGYGAYFMVDQANGGSAFTDLASWMAGLYFPDAFVEGNTAGLMFGQPLT
RVGAGNGATLTPANISNRATPYQIEAFYNYKINNLSITPGAFVIFNPEGDSNNSTTG
VFALRTTFTF"

gene 34732..36735
/gene="nrtC"

CDS 34732..36735
/gene="nrtC"
/note="ORF_ID:slr0043"
/codon_start=1
/transl_table=11
/product="nitrate transport protein; NrtC"
/protein_id="BAA10806.1"
/db_xref="GI:1001319"
translation="MSLFVAVDNIDKVFSLTDGGEYIALKGINLEIKKGEFVSLIGHS
GCGKSTLLNMIAGLDLPSEGIVTLEGQRIKQPGPKMVIQNYSLLPWLTVKQNI
VDEVKMGASAAERKAIVEEHINLVGLGHAVDKRPGELSGGMKQORVAIARALAIRPKLL
LLDEPFGALDALTRGNLQEQLMRICEQYQVTAVMVTHDVEAVLLSDRIVMLTNGPGS
NIGGILEVDIPRPRKMEVVEHPSYSLRSEIIYFLNQKRIKKLRAKKTTAIAHGL
EKVNLELGYVPLVACAPLVVAQEKGFPAKHGLDEVSLVRETSWRGIVDGIAGGYLDGA
QMPAGMPTWLTAGGYREQSIPVVSALTMTRNGNAITLSKKLYDQGIYTAEDFRQLLLA
SDGDRHTLGMVHPSSMHNLLRLYWLAAHNINPDRDVHLKTIIPPAQMVAADLKAGTIDGY
CVSEPWNLRASMEGAGFSIATDLEIWQNHGKVLGVREDWAIAPNTHVALVKALLEA
CAYCADPNHEMEIRELLATRQYLSTNIDYIHLGDPGRTCLGNPVEYSHHLLFFGDQF
NRPSRTEHLWMMTQMARWGDIPFPRNWVEILERVCRVGVFSTAARELGVDVNYQRQPI
ALFDGKVFNADDPIAYLNQTVIHRNFTIAEVHLDNPTPAPVFA"

gene 36808..37656
/gene="nrtD"

CDS 36808..37656

/gene="ndhD"
/note="ORF_ID:s1r0044"
/codon_start=1
/transl_table=11
/product="nitrate transport protein; NrtD"
/protein_id="BAA10807.1"
/db_xref="GI:1001320"
/translation="MQTLKSQRAMPTATPSDQKTTAFLTIENVSKVYPTAKGPYTVLE
NVNLTVNEGEFICVIGHSGCGKSTLLNMVSGFASPTDGSVQVGGKIITEPGPDRMVVF
QNYALLPWLTALENVYIAVDVHVSQKTEAEKRAIAKDHLMVGLTDSMDKEPQQISGG
MKQRVSIARALAIRPEVLILDEPFGALDAITKEELQEELLQIWNHRCVTVMITHDID
EALFLADRLVMMTNGPHANIGEIMTIPFSRPRDRIMEDPTYCYCLPNYALDFLYNRF
AHDDVA"
gene complement(37940..39463)
/gene="ndhD"
CDS complement(37940..39463)
/gene="ndhD"
/note="ORF_ID:s110027"
/codon_start=1
/transl_table=11
/product="NADH dehydrogenase subunit 4"
/protein_id="BAA10808.1"
/db_xref="GI:1001321"
/translation="MLSALIWGPIFGAILIAIIPNPDRDCYSRKIALGIMVAMAGLSV
LLAQGFNISDPQMCFVEYYPWLPSLGLNYHLGVDGLSLPELLLSALVVIAIFSTNTE
IERPRFYALLLLLLSGGVAGAFQAQDLLLLFFLFFLEIIPLYFLIAIWG3QRRGYAAM
KFLLYTALSGLVVLVSFLGWFWLTKAPNFDYNPSLADALPVKTQMLLLPLLLGLGIK
IPIFPFHTWLPDAHVEASTPVSVLLAGVLLKLGTYGLLRFGGLGLYLEAWVEFAPYLAT
LAAISALYGASCAIAQKQMKKVAYSSIAHMGYILLAAAAATRLSVTAASAQMVSHGI
ISALLFLLVGVVYKKTGSRDVKLQGLLTPERGLPITGSLMILGVMASAGIPGMVGF
AEFLVFRGSFPIFPTQTLCLIGSGLTAVYFLLMINRVFFGRRLTMELSHLPKVRWQEQ
IPAIALAVVIALGIIQPHWLTQWSEPQTAVLLTGHDPDLSVPAPPRIEIEVKELGEV"
gene complement(39628..41532)
/gene="ndhF"
CDS complement(39628..41532)
/gene="ndhF"
/note="ORF_ID:s110026"
/codon_start=1
/transl_table=11
/product="NADH dehydrogenase subunit 5"
/protein_id="BAA10809.1"
/db_xref="GI:1001322"
/translation="MSDFLLQSSWFIPIFYGLIGSILSLPWSFRLIKQTGPRPAAAYFNV
FMTLVSAIHGMVALSAIWQTPSEQIVFHWLQVADLDLTLAVEISPVSLGALSVVVTGIS
FLVQIFGLGYMEKQWSLARFYGLLGFFEAALGGIALSDSLFLSY3LLEMLTLSTYLLV
GFWYAQPLVVTAAARDAFLTFRVGDIIILMGVVALSSY3QQLTFSQLDNWASTVPVTGI
TATLLGLSLIAGPTGKCAQFPNLNLWLDDEAMEGPNPAGIMRNSVVVSAGAYVLIKLPV
FTLSPIASKTLIVLGTTLTVMTSLIAIAQIDIKRTLSSHSTSVYLGVLVFAVGLGQVDI
AFLLLFHAHIAKALLFMSIGSIIFTTSGQNITEMGGLWNRMPVTTTTSFVVGSAAGLLAV
FPLGMFWTWQKWFSGDWLVSWPALLALIIFVNLFSALNLTRVFRVLGKPKPKTRRAP
EVPWPMAPMVSLIIIVTLLVPIAPLQWSFWLSATYPLGLTSPVTQWAMPLMVAGITG
ILLGSLMPLRRNLSRSSRLPVRFQLQDLFAYDVYLDKIYGATVVAAVAAIAHISTWFDR
YVIDGIVNLVSLVTIFSGSALKYNVTGQSQFYLLTILVGVALLIWFSLSGQWMAIRQF
WSSWLSLILP"
gene complement(41777..42934)
/gene="s110518"
CDS complement(41777..42934)
/gene="s110518"
/note="ORF_ID:s110518"
unknown protein"
/codon_start=1
/transl_table=11
/protein_id="BAA10810.1"
/db_xref="GI:1001323"
/translation="MTRAFLLGFVISPPLALEVIVTHTNSDTGFSVYRASKIVNTMQP
TPPKPPKKTPETDLLETNVAAADDLIPEAPANTTLDTTAKNYYQAIGWLRGVVKKGEE
RYYVQIRDANFTLYLPRRAIAVAAALEGKLAWIKCYPQSKGEGLSFKVVMWGTEQHEK
SDPGIFVLRGVWQFIQPCRRPVFSVYRNELKSYENRPNQHLPLIWSDDPPYFRKDS
EERPKFYQILARLIPQRNCFGFVEQIAEPVEQTPRRVKKTPFNPDSSEKKPEYGHKGE
KQENALESPENLDDQQTPELLAEKLDGLDNDGRQLSSGATSLTEEPSNGSTEAV
VESEPSLEPELPVESKAKTTTSTGKTKTKTKPKATKTKTKTKGKTPPEA"

gene complement(43105..43410)
/gene="rbpA"
CDS complement(43105..43410)
/gene="rbpA"
/note="ORF_ID:s110517"
/codon_start=1
/transl_table=11
/product="RNA binding protein"
/protein_id="BAA10811.1"
/db_xref="GI:1001324"
/translation="MSIYVGNLSYDVSEADLTAVFAEYGSVKRVQLPTDRETGRMRGF
GFVELEADAEETAAIEALDGAEWMGRLKVNKAKPRENRSGGGSFGGGRKSYGGSRY"
gene 43712..44404
/gene="chlM"
CDS 43712..44404
/gene="chlM"
/note="ORF_ID:slr0525"
/codon_start=1
/transl_table=11
/product="Mg-protoporphyrin IX methyl transferase"
/protein_id="BAA10812.1"
/db_xref="GI:1001325"
/translation="MTNAALDDKTIVRDYFNSTGFDRWRRRIYGDGQVNFVQKDIRVGH
QQTVDSSVVAWLVDGNLPGLLVCDAGCGVGSLSIPLAQAGALVYGSDisEKMVGEEAQQ
KAQEVLAYGNQPTFMTQDLAQLGGKYDTVICLDVLIHYPTEEASAMISHLASLADRRRL
ILSFAPKTLGLTVLKKIGGLFPGPSKTTTRAYQHKEDIRKILGDNGFSIARTGMTSTR
FYYSRILEAVRS"
gene 44411..45193
/gene="panB"
CDS 44411..45193
/gene="panB"
/note="ORF_ID:slr0526"
/codon_start=1
/transl_table=11
/product="alpha-ketopantoate hydroxymethyl transferase"
/protein_id="BAA10813.1"
/db_xref="GI:1001326"
/translation="MAITPTQLLDWKRQORPIVALTAWDTAIASVLDAAAGVEIILVGD
SLGMVALGYETTLPVSLDTMIHHTAAVKRGVQORALVCDLPFLTYQESPAQAMGSAGR
VLQETGAQAVKLEGGHPRMVETVARLTEVGIPVMGHVGLTPQSVHQLGYRQQGQDPAT
AEKILHQAIALAEAGVFAIVLEHIPSELAASITEQLPIPTIGIGAGPQCDGQVLVTAD
LLGLTVKQPPFAPAYLNLRTITETVHKFSGEVRQRQFPRRG"
gene 45153..45968
/gene="exsB"
CDS 45153..45968
/gene="exsB"
/note="ORF_ID:slr0527"
/codon_start=1
/transl_table=11
/product="ExsB protein"
/protein_id="BAA10814.1"
/db_xref="GI:1001327"
/translation="MEKCDKDNFPGGVREQTKTLPTGCPGSSNDHNRLTAEKSMTKTA
VLLSGGLDSATVAIAKREGYRVIALSFNYGQRHDRELRAAADIVQALGIPHEFSIN
LDLAQWGGSSLTDRQQTLPQTGVPEPDIIPSTYVPGRNTVFIALGLSLAEAKGAEAVFL
GINAIDYSGYPDCRPEYLATYQQLAALSSKVGVEGRPIQLLAPLIELSKVDIVHKALE
LGVPIAQTWSCYAGGEEPCGRCDSCRLRDQALIEAGHPELASAKGRLWREKVD"
gene 46130..47647
/gene="murE"
CDS 46130..47647
/gene="murE"
/note="ORF_ID:slr0528"
/codon_start=1
/transl_table=11
/product="UDP-MurNac-tripeptide synthetase"
/protein_id="BAA10815.1"
/db_xref="GI:1001328"
/translation="MVKLGQLLASVPEVVAAPWLAQESDRCPALGKIVTGLSTNSHA
CPPGTFLFIGMPGTRVDGGEFWSGALEAGAIAAVVSEKALQKFPQNGECVIAVPDLVP
VCAGLAAAFYQHPAQTQLQLVGVTGTNGKTTTSHLIEYFLNQQRSSALLGTLTYTRWPG
YQKTATHTTTPFATDLQQLAEALQAGNQYAVMEVSSHALAQGRVLQCGFACAVFTNLT

553

CDS

CDS

CDS

http://.../query.fcgi?cmd=Retrieve&db=Nucleotide&list_uids=14595120&dopt=GenBan 1/08/2001

VFPAIATFAPAYAFANMTFPGRQLLFILVWCLLV...QTTLIPVLRNTYAQLGLAGTFL
GTVLAHTAYGLPLGIYLLRNYIGALPHDLIERAAVDSASHLKIFTKLVPLSMFAIAS
FAVFQFLWVNDLLVALVYLGGTADVAPVTIQLSNLVGSRQCDWYLLTAGAFISMIVP
LMVFFGLQRYFVRGILAGSVKS"
gene complement (53058..53891)
/gene="sl10513"
CDS complement (53058..53891)
/gene="sl10513"
/note="ORF_ID:sl10513"
unknown protein"
/codon_start=1
/transl_table=11
/protein_id="BAA10820.1"
/db_xref="GI:1001333"
/translation="MSGVDRMSLRNALKVLQETSRTFYIPISILPDQLLDAVASAYL
CMRAIDEVEDHPDLDAETKARILNQISLNLSATENSHSEDFIRGLDPYRNLLPEVTL
RVGEWALLAPESIAPRVWDATAAMSDRMFAFWALQNWQIRTESELDQYTFSVAGAVGLL
LSDLWAWHDGTQTNRSHAIGFGRGLQAVNIVRNYKEDKRRGVSVFFPQGWELADMHKYA
RYNLALADQYTKSLPHGPALNFCKIPLTLAYGTLVDVLALGKEKLSRSDVMALVNRVIA
S"
gene 54080..55297
/gene="slr0533"
CDS 54080..55297
/gene="slr0533"
/note="ORF_ID:slr0533"
/codon_start=1
/transl_table=11
/product="sensory transduction histidine kinase"
/protein_id="BAA10821.1"
/db_xref="GI:1001334"
/translation="MCYRQMGARGSKPLLFLNDPPLWALLRSANLNPMAKLSLGSRLF
LSHMLVMLVGLGSFVSLAKISSPRMFVLRLEELESQGFITVRSKTYLIRGFETAWNR
SSLWAIIFGASAAGGLSFLAADRIMQPLDRKLATKNLAEGDLQSRMPPSDIPELEEL
GQSFNRMADSLNVEQQRRRELVSDDLTHELRSPLTVVRGYLEQLAEGTIAGDPELYQRL
VGETRRLERLTVDLQELSKEAGYLSIQRPDLPLYLLAKLQORFADQLLEDGPELIL
AVQPPLPTVLADPDRAEQILVNLIGNAVRYTPSGAITIDAYLCTNRKDMKENLLWVT
VTDTGIGIAEGDLPYVFERFWRADKSRSRYSGGTGLGLAIKRLVELQGGSLTVTSTL
GQGSEFRFSLPLV"
gene 55396..57939
/gene="slt"
CDS 55396..57939
/gene="slt"
/note="ORF_ID:slr0534"
/codon_start=1
/transl_table=11
/product="soluble lytic transglycosylase"
/protein_id="BAA10822.1"
/db_xref="GI:1001335"
/translation="MVWHYSNIMHKKSQAQLQDYFKDLTAIGNASSEQMEANRDGIQG
ETEENINPPPQNPKRLSLPNLSSPSLAEEAENLESAGQPGSDYLSNSFGQANKANVA
VAPVNSDYIAPEKLEDQPGDFFGGKRWFWLGGILVLLVGGTALTLPKALEMVNGWRQE
AQLKAYEQEQHQDSEVLRLLALLPPDQRRSKLEAIANQEVLSLERSRARFLLAGDLLAE
FEGGPALRVLEGLEVPVLPAPYILLMRGRGYQLSNENDQAEATWQDILDQYPDSPVV
VNALENLGSLEDITYWQQAIAHHPGHPRTLAILHQLESEPNALETIQRIQLQNHPTDGR
TAAVINSLTANRQGEITPEDWQAMGDNFWHRRINQAIAPYEKAPSNARNLYRLARAQ
QISKLDNEAKENYRQLIATYPDSEETALALRRLAELVPPREGVQYLQQLQEQFPDQGA
SALAARIDLLAKFDANQAQARQALLQKYPNSDAAADYRWRQAQEFKAGNYTEAWRW
AKEIANQNPDSDVTPKAI FWIGKWAQQLGRSADSKAAFETVLAKYPQSYAWRSVLL
GWQVGDFNSVRFLNPPVTPDQRPPLPPAGSPTFRELYRLAQDQEAIELFNAEVRARAE
GEATPELTVNEGFTALLKLTQQEYLOGINQVLNLRNPEDPEQRKQWELRSTRDYWQ
TLFFPYQQLIFEWSEKRQVNPFLVTALIRQESRFEKNIQSPVGATGLMQIMPATAEW
IAPQIGLKEYSLTPTDNDVNMGTWYFDHHTKTYNNNSALAVASYNAGPGNVAKWLQEF
NNADPDLFVERIPFAETKGYVESVFGNYWNYLRIYDPDVEKLMGQVGKN"
gene 58180..60021
/gene="slr0535"
CDS 58180..60021
/gene="slr0535"
/note="ORF_ID:slr0535"
/codon_start=1
/transl_table=11
/product="serine proteinase"

/protein_id="BAA10823.1"
/db_xref="GI:1001331"
/translation="MIKRFFLDFFAGLWFLNLYLQHRGTAHGRNYOSLIINFEND
IPTQTLTADIQADIGKLEKTVDFNSIFSISKDYVYTVKGDGEDLRLRRSPLMKEVDYV
EPNYVYQALEVPNDPEYSKQWNLRAIAMESAWDGSKGEVTVVAVIDTGVTRVPDLRQT
QFVTGYNFVDDNRDSTDYNGHGHVAGTIAQATNNEYGVAGIAPKAKIMPLKVLGDNG
GGTVADIAEAIYAADNGASVINMSLGGGGESKTLADAIDYASKGVIIAAAGNEGQ
NAAAYPGRYPKVISVAATDATGNKADYSNYGAGVDIAAPGGSTDGKDGKILQETIDPD
TREPVLNGFGQGTSMAPHVAGTAALIQSVQLQQAQVGLSTRAAENLTIAEVSEPEMVL
KILFASARSVPNDLSNYYGAGHVNAGEAVKQAQQGEISFRDFMRWLPDNGYLNPIFWF
DGGAVAFPLPYLAMVLGSYLLVLLRIYLPLOFTWPFNWGLIFGSSGLFFLQGLYIFDL
PQWPFAMGSSLPGLNSLPGTGLLNPFASALIPIVLLLLLLGNPSGKQWSLGVCFG
VTVFLLISAFGLGTPLWLIGTGSTAIAPLVNALICLGLGSLAAKGEH"
gene 60128..61180
/gene="hemE"
CDS 60128..61180
/gene="hemE"
/note="ORF_ID:slr0536"
/codon_start=1
/translation_table=11
/product="uroporphyrinogen decarboxylase"
/protein_id="BAA10824.1"
/db_xref="GI:1001337"
/translation="MTEANDLPYLLRVARGEVVKRPPVWMMRQAGRYMKVYRDLRDKY
PSFRERSFNPDLAIEISLQPWQAFQPDGVIMFSDILTPLPGIGIPFDIESKGPIDP
PIRTCAQVDQLHALPESSLPFMTILGTLRKEVGNQSTVLGFVGAPWTLAAYAIEGK
SSKDYKVIKQMAFSEPAIILHSFLDKIAEAIYVYRYQIDCGAQVQVLFDSWAGQLSPQ
DYDTFALPYQQKVVYKLVKEIHPDTPLILYISGSAGILERMGKSGVDIVSVDWTVDMAD
ARQRLGKEMKVQGNMDPGVLFQSQDFIKERILDTVRKAGQGGHIFNLGHGVLVGTPE
NVRFFETAKQVDQLL"
gene complement(61327..62235)
/gene="sl10509"
CDS complement(61327..62235)
/gene="sl10509"
/note="ORF_ID:sl10509"
/codon_start=1
/translation_table=11
/product="Ap-4-A phosphorylase II"
/protein_id="BAA10825.1"
/db_xref="GI:1001338"
/translation="MGNVVARCQERSYLFALTMAESYLLPGQLWPRLLAQSDHALKTG
ALQPIITAVTTLEVGEINFVVRILTQIHRKKIITEHQHRQKINPFLPYDADLFGVHFS
PTHGLGLNKKFKVDQHLIIVTREFEDQQSPLTLGDFGVAVQVLEEKEGLVFNNGPKA
GASQPHRHLQWIPPLVENGQKFLADHFIQAKNLFPKTAIAPLTMDVINADGGKIC
YQIYQDLLQQLGLQTAGGAKPHPNLLMTREFLAIVPPRSQESYQDIEVNALGFAGGL
VRNQQQLELLQQLGPWQLLQKVGIAQ"
gene complement(62337..62849)
/gene="sl10508"
CDS complement(62337..62849)
/gene="sl10508"
/note="ORF_ID:sl10508"
unknown protein"
/codon_start=1
/translation_table=11
/protein_id="BAA10826.1"
/db_xref="GI:1001339"
/translation="MPTSMSEWNQFLAYFPLDKANWNFKASQNLTAPLILYYSGLVLA
TPNLRHLLLVSQLKGTDTESFGNQSMRPMFDDHSHDFTMLYAQGSAPQRRDLLFH
FQISGSDITAKQLAYFLVEACSKAKDEDHVYLGDRRHRNFWADLGRTKLSQLNVDSRI
WEDEQSLQII"
gene 63085..64086
/gene="slr0537"
CDS 63085..64086
/gene="slr0537"
/note="ORF_ID:slr0537"
unknown protein"
/codon_start=1
/translation_table=11
/protein_id="BAA10827.1"
/db_xref="GI:1001340"
/translation="MGHKYDVYGMGNALVDMEFEVTPEQLASLGIDKGVMTLVVEARE

geneCDS

NEELAAQLAQQRGKQSSSGSAANTLVSLAQLGGTG...CKVGHDEASAFYLQDNDGGI
DTNPFHETAGEGITGKCLVFTPDADRTMDIAFLGISGSLSVTEMDWSALKQSQVLYLE
GYLVTSPSAAKACIEAKAIAEQSGVKTCLSLSDPNMAKFFQDGLKEMLGSGVDLLFAN
EAEALEMAGTSDLNQAIAAYCKSIKKNFALTRGGAGSLIFDGENLLTIGTPKVQPIDTV
GAGDMYAGGFLYGLTHGMDYEKAGQLASETAAKVVTCYGPRLDTEILQEILQSVQAV"

complement (64096..65259)

/gene="sll0507"

complement (64096..65259)

/gene="sll0507"

/note="ORF_ID:sll0507"

/codon_start=1

/transl_table=11

/product="magnesium and cobalt transport protein"

/protein_id="BAA10828.1"

/db_xref="GI:1001341"

/translation="MPQTQPGIEDFLLRQLRHPQEEEEEDYFDYFYDEPGSEPGTSL
IEPDAPPSRIVLVDSYSPSHAVRKSDISPNALRPYLGTNTVSWMDIEGLGSEEVLEKEVG
EIFKLHPLLEDIVNVQRAKVEDYNDHVMVIAHRVRPNREEDGFSEQVSFVLGKRY
LLTFQEGHIIDCFNPLRERIRTNQKGVCQQGADYLCYLLIDMLIDEYFPLLEDYEERI
EALEDTIIRNPSSLMEIYHIRRELLALRRLIWPLRHVMNVLLRDTTNSIVTADVRI
YFRDCYDHIIQVLDIIEAYRELASSLMEVYMTAMSNKMNEVMKFLTIVISTIFIPLTFI
AGVYGMNFKEMPELNSRWGYITWIVMLLIAGGSLYFFWRKGWLSPSYDLGEK"

geneCDS

complement (65391..66140)

/gene="sll0506"

complement (65391..66140)

/gene="sll0506"

/note="ORF_ID:sll0506"

hypothetical protein"

/codon_start=1

/transl_table=11

/protein_id="BAA10829.1"

/db_xref="GI:1001342"

/translation="MTIKPVILETLPPDLDDQORLPQHVAVIMDGNGRWAKQGRMPRIM
GHQRGVDSLKNLLRCCDDWGIAALTAYAFSTENWGRPLEEVEFLMTLFERVLRRLEKE
MMAENVRIIRFVGNLTSLPRSLQDEIARSMEDTKNNTGIRFTVATNYGGRQEIVHVCQA
IAREVQSGKLDPETIDEGVVEKYLYTEGLSHPDLLIRTSGELRISNFWLQWQMAEYIY
VTSTLWPDFDRQAFHLALRDYQQRHRRFGKV"

geneCDS

complement (66137..67048)

/gene="sll0505"

complement (66137..67048)

/gene="sll0505"

/note="ORF_ID:sll0505"

hypothetical protein"

/codon_start=1

/transl_table=11

/protein_id="BAA10830.1"

/db_xref="GI:1001343"

/translation="MSGFPPDLTSLPPFFHGALDGLVLVIGLFYLLSRVFGENQILWIM
RGLLVLMVAQLVSDRLHLELLKFVLEKFVLGTAVALAVIFQAELELLELLGQGRFLE
LLRRRSSPPSTDAIDEIVDAVKELSONRIGALMVMEAAQGILDSRIFLNRGVAIDSKL
SKELLQTIQPKTLLHDGAIFIRGSRLVAAGVILPLSERSASRQLGTRHRAAMGITEK
SENCLCIVVSEETGSITLAQGGNLRPLTSSKLKELLETEYAPPTERESVTPQLSRLS
RSLSNQSWGILRRLWLPSSTAQNDKK"

geneCDS

complement (67091..68500)

/gene="lysA"

complement (67091..68500)

/gene="lysA"

/note="ORF_ID:sll0504"

/codon_start=1

/transl_table=11

/product="diaminopimelate decarboxylase"

/protein_id="BAA10831.1"

/db_xref="GI:1001344"

/translation="MLSTEMPLPTTGSTLLKTPASPSPNQNLLPLTAVINKNGELEIG
GCSVPALVEQFGSPYIILDETTLRQAAQQYRQSFQAHYPGSSQVIYASKAWSCLAVVA
IAAQEGLGFDVVSGGELFTTVSALKQLGWDEAIEAEKIYFHGNKSVQELQEAIAINC
TIIVDNWLELETCLKAADSGAPVKIMLRLTGIECHTHEYIKTGHLDKSKFGFDPNQL
EAVFTYIAQQPSLHCLGLHAHIGSQIFERQPHKDLGEVLVQWFTKGLTYGLPLTELNI
GGGLGICYTESDDPPSIEEWAQVAASVAKACDRQNIYPKLIAPGRSLVGSACVTA
YRVGGRKVVPNIRTYISVDGMSDNPRPITYQSVYRVALANRMDEITETVTVAGKHC
ESGDILVKDVALPAAEPGDIMVVAATGAYNHSMASNYNRLGRPAAVLVNQGANLILQ

gene RETYTD...DCLP...LLS'
complement (58869..70093)
/gene="sl10501"
CDS complement (68869..70093)
/gene="sl10503"
/note="ORF_ID:sl10503
unknown protein"
/codon_start=1
/transl_table=11
/protein_id="BAA10833.1"
/db_xref="GI:1001345"
/translation="MNNNSLTDLDTLDIISAIQEDLNYQQAQASLTAIVEQIDLDTT
EKQGLEKEISHLCTMLENLNQGQVQIAAFGLVGRKSSLLNALLGEQVFTTGPVHGVT
QTQQSASWQLNQADGLSTVTISGWGNAQLQLIDTPGIDEVKGQEREQLAIAVAQQVDL
ILFVIAGDMSQVEFQALSRLRAVGKPMLLVFNKIDQYPATDQQLIYEKIRDERVKELL
SPEEIVLVASPLVTELRENTQCKLERYQYRGEAKVDNLRKIIDLQREGKSLVALN
TLLCADNLNDKLVQCKMRLRDSQANTILQKAVMKATAIALNPVTVLDFSGAVVDVA
LIISLSKLYGLPMTQTAAIALLOKIGVSMGKITASEFLAGLGLSSSLKGLLGLTVPLTG
GLALAPYISVALTQASVAGVSTLAIGQVTKTYLANGAAWGETGPRTVVRDILNSLDQN
SVMARIKQELQEKLTPERIVSPSP"
gene complement (70095..71849)
/gene="argS"
CDS complement (70095..71849)
/gene="argS"
/note="ORF_ID:sl10502"
/codon_start=1
/transl_table=11
/product="arginyl-tRNA-synthetase"
/protein_id="BAA10833.1"
/db_xref="GI:1001346"
/translation="MVSILTQLNDHFAQALEGQFSPDVTLPPLVVPASNPKFGDFQC
NIALPLAKQLGQPPRAIAMEIVDKVNLSEICEPLTIAGPGFINIKLLPDYLGELIKL
QQNQQLGVSLVKGEERIVVDFSSPNIKEMHVGHRLSTIIGDCLARVLEFRGYDVLRL
NHVGDWGTQFGMLITYLKEVYPEALVTADALDIGDLVTFYKQAKQRFDDQEQFRETSL
QAVVALQAGDAKSIKAWQLLCEQSRREFQLIYDCLDITIEERGESFYNPFLPGVVELL
QEKDILLVEDNGAQCVFLDGFTNKDGRPLIVQKSDGGYNYATTDLAALNYRLNTDGA
EKIIVYTDAGQANHFAQFFQVAEKAGILTDPDTQVHVHPFGLVKGEDGKKLKTRAGDTI
RLKDLLTEAVTRARQDLETRLTAERSETEEFKTEVAQRVIGAVKYADLSQNRSDY
VFSFDKMLALQGNTAFYMLYAYARIQISISREGGIDFAQMDSGEIVLTEPTTELVLAKNL
LQFADVETVEISLLPNRLCDYLYELSKVFNRFYENCVPLKASDPQGRSRLLLCDLTA
RTLKGLSLLGIPVLDRL"
gene complement (72047..73003)
/gene="sl10501"
CDS complement (72047..73003)
/gene="sl10501"
/note="ORF_ID:sl10501
hypothetical protein"
/codon_start=1
/transl_table=11
/protein_id="BAA10834.1"
/db_xref="GI:1001347"
/translation="MTIELSIVIPMYNEEDNLEHLFARLLEVLTPLKITYEIIICVNDG
SKDKTLKQLIDCYQSNRQIKIVNLSRNFGEIALSAGIDYAQGNVAPIADADLQDPPE
LIHELVDKWREGYDIVYATRRSRQGETWVKQFTAKMFYKVI GRMTEIKIPNTGDFRL
MDRKVVNAIKQLPERTRFMKGLFAWVGYRQTFVLFDREPRFQGGQTKWNYWKLWNFALD
GIFSFSLLPLKVWYTLGSIISLLSLAYASFLILKTTITLGVDVPGYASLMVAIFLGGV
QLISLGVIGEYLGRVYEEVKARPLYLVSDLWGLEYLPLEKLN"
gene 73205..73915
/gene="slr0541"
CDS 73205..73915
/gene="slr0541"
/note="ORF_ID:slr0541
hypothetical protein"
/codon_start=1
/transl_table=11
/protein_id="BAA10835.1"
/db_xref="GI:1001348"
/translation="MQAHFFQHVFPFENLGAIERWLRAKGYAISQTAFFQPSFSLPSLD
AIDLLIVLGGPMSVNDQAQYPWLVEKEFIRQAIAGVKPILGICLGAQLMANALGAKV
YRNAVKEIGWFPIMQEGKSQSGSFQPPSLEVFWHGETFDLPPGAELIASSQACQH
QAFQIGRSAIGLQCHLETTPTAAQALVDNCADELILGPFVQDATTILADNQAARFATMG

gene 73995..74591
/gene="clpP"
CDS 73995..74591
/gene="clpP"
/note="ORF_ID:slr0542"
/codon_start=1
/transl_table=11
/product="ATP-dependent protease; ClpP"
/protein_id="BAA10836.1"
/db_xref="GI:1001349"
/translation="MIPTVIETSGRGDRAFDIYSRLLRERIVFLGQEVVDENANLVVA
QLLFLEAEDPEKDIYLYINSPGGSVSAGLGIFDTMNQIRPDVCTICIGLAASMGAFLL
SAGAKGKRMSLPNSRIMIHQPLGGAQQQATDIEIQAKEILYLKALLNQHLNHTGKSL
EEITADTERDFFMSABESKEYGLIDQVINRRPSASDPI"
gene 74669..75907
/gene="trpB"
CDS 74669..75907
/gene="trpB"
/note="ORF_ID:slr0543"
/codon_start=1
/transl_table=11
/product="tryptophan synthase beta subunit"
/protein_id="BAA10837.1"
/db_xref="GI:1001350"
/translation="MNITSPLSAPSHQYPDALGRFGNYGGKYVPETLMPALTELEEAY
YRYRAESSFOEELAGLLKDYVGRSSPLYFAERLSAHYARPDGTYPLIYKREDLNHTG
AHKINNALGQVLLAKRMGKKRIIAETGAGQHGVATATVCARFGLLECIIYMGVQDMERO
KLNVMFRMNLGARVQPVTAGTGTLDATSEAIRDWVTNVETTHYILGSVAGPHYPMM
VRDFHRVIGQETRQQAQKKGWGLPDILLACVGGGSNAMGLFYDFIDPAVRLIGIEAA
GESIVSGKHAATLTMGKPGVLHGAMSYLLQDKEGQVTEAHSISAGLDYPGVGPESYSL
KDAGRAEYYSVTDQEAITLQRLSQLEGIIPALETAAHAFAYLETLCPLKNGERIVIN
CSGRGDKDVQTVAKYLQMEI"
gene complement(75978..78824)
/gene="sll0499"
CDS complement(75978..78824)
/gene="sll0499"
/note="ORF_ID:sll0499"
unknown protein"
/codon_start=1
/transl_table=11
/protein_id="BAA10838.1"
/db_xref="GI:1001351"
/translation="MDGEGNKLAENDDLTYDTNAGILINQIDPQGYGVVVTSSNKSQVGTG
KYKLQIILPDANQLVEIQGHQSLIKAQAMMDEGSKESSLQAIELFTQGLEFYRQIGIV
NRETVFALNRLGTIYSDFGKESQALAYYEQAIPLAQQLQDKALEGATLNNIGSIYNAL
ADRKKAIDFYQQAQALVLRQAGDKTEEMTTINN LGVAYDNLGESEKALQYYAEALALGK
SLNDLETIGTSLSNIGLAYNNLGEREKALEYYQEALTMRSVSGDRQGEAVRLNNIALV
YDGFGEKDKALQYYIESLIIAEAVGDQSLQGSVISNIALVLDGLGQKAQALEYYQQAQ
ELARLVGDRSGEGIRLNNIALLYDSVGEKDEALTYEALKEALKISQETGDRLVEGAILSN
IGYVYDGLGELNQAMDYYQQAQALVLRREIKDRDGEALTLNNIGTIYYAREDYDQALNYY
EQALSLSRAVKNVNGLEATILSNIGYVEFDQRKYDKSTLFLTAIDLFEINSEDLSD
LKVSYFDITYLYNYFRLQESLIAQNEPAVALEVAERGRARALVELLNKRFARDANFIPT
EKPTIAALKKIAGDRQSTLVTYALIPTKDLASPIKLYIYVIAPNGTMEFRQMDFNQDL
QDVDFVQLLQTTQSVTRRSPSDIIARRTAQEASASLQQLHQILIDPIADLLPNNADA
PIIFIPQGAQFGIFFPALQDSNGQYLI EKHTILTAPSIQVLAQTAQQKQRLKQQAQNL
TPALVVGPNPYPPDNLNLTNAANEAKQIGQLLGVPPLIGKQAREAAVLAQMPRAEVL
HFATHASFDEQNGLESAILYLTAEPDQSKEDLLSTPGRITAAEIFDHFETNPLHADIAI
LSACDTGQGEITGDGVIGLSRSLIAAGVPSILVSLWSVDDASTEKLMTFEFYQKWQQQG
LGKAAALRQAMLQLKEEYPEPYWGAFTLIGAE"
gene 79252..80052
/gene="slr0544"
CDS 79252..80052
/gene="slr0544"
/note="ORF_ID:slr0544"
/codon_start=1
/transl_table=11
/product="ABC transporter"
/protein_id="BAA10839.1"
/db_xref="GI:1001352"
/translation="MLDSNSLVIYSPDSKGRQDSHPDALLRLEGVSKIYAGPTEV

gene complement(80076..80528)
/gene="sll0498"
CDS complement(80076..80528)
/gene="sll0498"
/note="ORF_ID:sll0498"
unknown protein
/codon_start=1
/transl_table=11
/protein_id="BAA10840.1"
/db_xref="GI:1001353"
/translation="MKNRFVALIFALLFGSFLHKKFYLGHI FAGIAYLIFSWTGIP TI
LGFIDVILGTMDERKFNAIYNHKHYLASPPTPIVTPPPVNTTEFLDVLIKTCAAKA
IGATVSECIVATGEDPQVKETIDVLCRKGFLLPDNREGDYAVVTRPI"
gene complement(80555..81382)
/gene="sll0497"
CDS complement(80555..81382)
/gene="sll0497"
/note="ORF_ID:sll0497"
unknown protein
/codon_start=1
/transl_table=11
/protein_id="BAA10841.1"
/db_xref="GI:1001354"
/translation="MTMANWENFLKNLGEWQGSFTRLSPQGEILSNTPSILTLEGLDD
DKLVKFRRLRRYDNPDYQDPPTQDYSQDYRSLGRQIIFFGTGAFSKGPWQLAPFSEFGA
EFGFVDGDRRMRFVQLYDKGLSLASLTFFIREFRRGSDAQERPALHVEQLLGTVQCQVY
TGYPDWREPELSTMEISLSQTGDSVEQRTVVGQTSVMQGVMDQIHFLGPNPNSKVL
LLPDGASSCTPDRLQLGQPFSGEVGWLVRPNERQRLIRYYDNRGAWTHSAFVVEHRQ"
gene 81559..82503
/gene="slr0545"
CDS 81559..82503
/gene="slr0545"
/note="ORF_ID:slr0545"
/codon_start=1
/transl_table=11
/product="auxin-induced protein"
/protein_id="BAA10842.1"
/db_xref="GI:1001355"
/translation="METIRLGPNGPSIAPLGLGTWSWGDTLFWAYGDFGPPQVEVEGAF
HASLEAGVTLIDTAEIYGFGESERLIGRFCEKTKQVEIATKYFPLPWRWQRSDITKA
LTASLERLQMDTICLYQIHWPLEFWLKTDFMAVLAASVKKGRIGAVGVSNYSAAQMA
IAHECLAAQGIPLASNQVPYSLNREIESNGILTCARQLNVTILAYSPLAQGLLTGKY
RPENSPSLQGARRLDPRFSTKGLRKLAPLLTLLDTLADKHDKTPAQIALNWLIAQGNV
IPIPGAKNASQAQQNAGALGWQLNPEEIEQLRSAAQGI"
gene complement(82648..83832)
/gene="sll0496"
CDS complement(82648..83832)
/gene="sll0496"
/note="ORF_ID:sll0496"
unknown protein
/codon_start=1
/transl_table=11
/protein_id="BAA10843.1"
/db_xref="GI:1001356"
/translation="MMFLSKTLTSLGQWPHSLPRISLMDRYVARQLIPPFLFSVGVA
SLGLAIGNLSDLGNKIVEKNLPVAKAAEVLLLVPEFLAYSPLVAVMLATMMTFGRLS
GDCEIIAIRSCGVSLYRLILPAVVLSSLVTGWAFVLTEWVVPVANYRATSILIESIDE
EHPFWQNRDVFYPEFEEIKLDNGQTARRLKS LVYAEKFDGKEMQNLTVLQWTENHLKH
IVLSDNATWNNNDNKRWDFFHGTVYRLTETEDYQEAVPFTNKQIALPQSAFDFARQGRD
PYEMTIAEAQDYIKILKLIGDEKKTQFFQVRTEQKLAPPFVCIVFAVVGSAIGARPQR
ISRATGFLTIVIIIFAYYILGFFSGSLGIVGLISPTLAAWLPNFVGLGVGIWLLYEYN
QG"
gene complement(83873..85414)
/gene="asnS"
CDS complement(83873..85414)
/gene="asnS"
/note="ORF_ID:sll0495"

/codon_start=1
/transl_table=11
/product="asparaginyl-tRNA synthetase"
/protein_id="BAA10844.1"
/db_xref="GI:1001357"
/translation="MVKIFFSGLVRFSLGSLGASCVGIGYPRIGSVVPWFNSGTHCPS
LSSSLGFMNKRRIIEVLRHGQADDQVMVQGWLRTRKRTLKQFSFVEVNDGSSLANLQVV
LDGSLADYDRLLSQLQTGAALVVEGKLAPSPGKGQRVELKATKLELLGGADPGSYPLQ
KKRHSFEFLRTIGHLRPRTNTIGAVMRVRNACATAIHQFFQERGFVHTPIITASDC
EGAGDLFKVTTLDLQRPVKNKEGIDYSQDFFGKQAYLTVSGQLEAEVMALAFQNVYTF
GPTFRAENSNTSRHLAEFWMVPEMAFCDLLEGDRQWAEFBLKYIFKFVLEKCPEDMEF
FDQRIDNTVLATADNIINNEFAWLTYSIAIKLLEKADQKFEYPVANGVDLQSEHERYL
AETVFKRPTIVTDYPKDIKAFYMLNDDGKTVAAMDILAPKIGEIIIGGSQREERLDIL
TQRMQEQGVPEEDLWWYLDLRRYGSVPHAGFGLGFERIVQFMTGMANIRDVIPFRTP
MNAEF"
85454..85535
/product="tRNA-OTHER"
tRNA 85544..85615
/product="tRNA-OTHER"
gene complement(85826..86731)
/gene="s110494"
CDS complement(85826..86731)
/gene="s110494"
/note="ORF_ID:s110494
unknown protein"
/codon_start=1
/transl_table=11
/protein_id="BAA10845.1"
/db_xref="GI:1001358"
/translation="MVARAILLQLILLFSNNLIHAQEIDLEENNSSDQDIPVTVSNL
PINQHSKPVLIQENTLIDPSNLEYEEKI IHLETNFELSSNSLTLSSFISPILIKEDY
LVVSNESPHSNLELSLASQGYQQTNEQNILHDLHDHNETIIDSPVNWNLTDKYLALSP
FSWHIDYTEPDVNNFPMGAGAAVDFEIINPNYGFFNHLVQDSIVSLEFNI FRDSDFGY
PAGYVGLSLRRNIFASPIQVGSALGLLHTTQLQELSGSPVLPFMLPFLQTD FIPVNL
RIVYIPSFADYNSQQVFFTLMIKVN"
gene complement(87025..87711)
/gene="s110493"
CDS complement(87025..87711)
/gene="s110493"
/note="ORF_ID:s110493
hypothetical protein"
/codon_start=1
/transl_table=11
/protein_id="BAA10846.1"
/db_xref="GI:1001359"
/translation="MKTSHFLSLIRQEKQFAVIGLGRFGRVAVCETLHVNGYEVGLID
QDPKLVAEVLADRVRVGNALSDSTDDTALREAGIFEIETVIVAIGNYLKESIITCLNL
KEGGVKSVAKVSSDTHEKILKRLGVDLIIFPEHKAGQDLAYTLTPAIVDRFKLDPN
NSIVEILVPEEFCDKTLAELQLRKNHGVSVLAVGHEEKFKINPPPQERLHRGMILVLL
GSNEDIGRLV"
gene complement(87737..88663)
/gene="argF"
CDS complement(87737..88663)
/gene="argF"
/note="ORF_ID:s110902"
/codon_start=1
/transl_table=11
/product="ornithine carbamoyltransferase chain f"
/protein_id="BAA10847.1"
/db_xref="GI:1001360"
/translation="MGIKALAGRDLLAIADLTIEEMKSLLQLAADLKSGVLKPHCRKI
LGLLFYKASTRTRVSFTAAMYQLGGQVLDLNPVSVTVQVGRGEPIQDTARVLDRIIDILA
VRTFKQTDLTQTFADHAKMPIINALSDLEHPCQILADLQTIKECFGKLEGLTVTYLGDG
NNVAHSLILGGVMMGMTVRVATPKNYEPLAEIVQQAQQAAPGGKVELTDDPKAAQAG
SHILYTDVWASMGQEDLADSRIPFQPYQINQELLALADPEAIVLHCLPAHRGEEITD
AVMEGPQSRLWDQAENRMHAQKALMVALLGLV"
gene complement(88776..89306)
/gene="purE"
CDS complement(88776..89306)
/gene="purE"
/note="ORF_ID:s110901

gene:phoX adp5'
/codon_start=1
/transl_table=11
/product="phosphoribosylaminoimidazole carboxylase"
/protein_id="BAA10848.1"
/db_xref="GI:1001361"
/translation="MTSPSPFLVGIIMGSDSDLPTMAAAIAVCEFAVPTEVAII SAHR
TPERMVEYAQTAHQRGDRITAGAGCAHLPGMVAAALPLPVIGVPVQTKTLQGVDLSL
YSIVQMPGMLFVATVAIGNAFNAGLLAVQILASHNPVLEKVOQYRQSLETMWLDKQA
ELERLGYRRLDQQNQ"
gene 89407..89772
/gene="ssb"
CDS 89407..89772
/gene="ssb"
/note="ORF_ID:slr0925"
/codon_start=1
/transl_table=11
/product="single-stranded DNA-binding protein"
/protein_id="BAA10849.1"
/db_xref="GI:1001362"
/translation="MSVNSIHLVGRAGRDPEVKYFESGNVVCNFTLAVNRRTSKKDEP
PDWFDLEIWGKTAETIAGNYVKKGSLIGIQGSLKFDHWEDRNSGTPRSKPVIRVNNLDL
LGSKRDNAEATMNNYPPEEF"
gene 90109..90987
/gene="ubiA"
CDS 90109..90987
/gene="ubiA"
/note="ORF_ID:slr0926"
gene:ubiA or cyr"
/codon_start=1
/transl_table=11
/product="4-hydroxybenzoate-octaprenyl transferase"
/protein_id="BAA10850.1"
/db_xref="GI:1001363"
/translation="KVAQTPSSPPLWLTIIYLLRWHKPAGRILIMIPALWAVCLAAQG
LPPLPLLTIALGTSLGCVVNDLWDRDIDPQVERTKQRPLAARLSVQVGIGVA
LVALLCAGLAFYLTPLSFWLCVAAVPVIVAYPGAKRVFPVQPLVLSIAWGFAVLISW
SAVTGDLTDATWVLWGATVFWTLGFDTVYAMADREDDRRIGVNSSALFFGQYVGEAVG
IFFALTIGCLFYLGMLMLNPLYWLSLAIAIVGWVIQYIQLSAPTPEPKLYGQIFGQN
VIIGFVLLAGMLLGWL"
gene 91177..92235
/gene="psbD2"
CDS 91177..92235
/gene="psbD2"
/note="ORF_ID:slr0927"
/codon_start=1
/transl_table=11
/product="photosystem II D2 protein"
/protein_id="BAA10851.1"
/db_xref="GI:1001364"
/translation="MTIAVGAPVERGWFDVLDLWLRDRFVFIGWSGLLLFPCAFMA
LGGWLTGTFVTSWYTHGLASSYLEGANFLTAVVSSPADAFGHSLLFLWGPEAQGNLT
RWFQIGGLWPFVALHGAFGLIGFMLRQFEISRLVGIRPYNAIAFSGPIAVFVSFLMY
PLGQSSWFFAPSPFGVAGIFRIFILFQGFHNWTLNPFHMMGVAGILGCALLCAIHGATV
ENTLFEDGEDSNTFRAFEPTQAEETYSMTANRFWSQIFGIAFSNKRWLHFFMLFVPV
TGLWMSSVGIVGLALNLRAYDFVSQELRAAEDPEFETFYTKNILLNEGMRAWMAPQDQ
PHENFIFPEEVLPRGNAL"
gene 92360..92947
/gene="slr0929"
CDS 92360..92947
/gene="slr0929"
/note="ORF_ID:slr0929"
unknown protein"
/codon_start=1
/transl_table=11
/protein_id="BAA10852.1"
/db_xref="GI:1001365"
/translation="MIIAITALKGGVGKTTTAVHLAAYLQQKDQTLIDADRNRSAI
WAREEKLPHYVASQAGSTALIRKYPHIVVDTRAMPDELDEFRLAEGSDLLIIPPTPNH
LDLDATLKAAEQLASLKVNYKILLTKVDARTRSGREARQLQAENLPLFTTEIPLLVA
FERASQSGVIIIRDYVDPDRSHLAWGRYKAVGREILP"

gene 92966..94276
/gene="slr0930"
CDS 92966..94276
/gene="slr0930"
/note="ORF_ID:slr0930
unknown protein"
/codon_start=1
/transl_table=11
/protein_id="BAA10853.1"
/db_xref="GI:1001366"
/translation="MTVPYPTPLLATSSKALYHQVSSLLLYQGIFDNPIGEAFLLDLLR
CLHHNGTNQKPEATVCLQAYGVWFRHLAEAGQSWQDFLLDRLLLEDENPFSSVRVQREEL
AQLPTSLQDAARHDLNLIQM VYQCPPEQILQWV IASQTPVALKAWQVNPQLEFPAEG
GQNWGENLAYLVAHYRQKGVGAVAHYRAFRWRGKNLQGV PQIDGVRLADLVGYDDPQK
ILCQNTQCLLOGLPALNVLLYGSRGSGKSSLVKALVNQYGDRGLRLVEVSPRDLITLP
LLVGKLRTPQKF IIFVDDLSFEEEDERFKSLKV VLEGDLVARPANVVIYATSNRRHL
IREFFGDRPSPQDADEVQAWDTVQEKLSFSDRFGLTLTFPPANQDTYLMIVHHLAKQA
QINLSETELDFRAKQWATRHNRSRGRTARQFVDYLIGEQGLTSP"

gene 94299..94577
/gene="ssr1558"
CDS 94299..94577
/gene="ssr1558"
/note="ORF_ID:ssr1558
hypothetical protein"
/codon_start=1
/transl_table=11
/protein_id="BAA10854.1"
/db_xref="GI:1673327"
/translation="MDWQLFGLSFITVFLAEIGDKSQLAAIALGGS AKSPRAVFFGSV
TALILASFLGVLAGGSLAQFLPTKLLKALALGFTIMALRLLWPNQED"

gene complement(94574..95206)
/gene="hisG"
CDS complement(94574..95206)
/gene="hisG"
/note="ORF_ID:sll0900"
/codon_start=1
/transl_table=11
/product="ATP phosphoribosyltransferase"
/protein_id="BAA10855.1"
/db_xref="GI:1001367"
/translation="MLTIALPKGSLLRDSIDRFQQIGLDFSAFLEPKNRQLQILDPTH
RAKALLVRAWDVPVYVEYGQAQLGIVGYDILREKKPAVAQLADLNFGGCRLSVAVPQA
SPYRRSVDLPPHGRVASKFVHCAL EHFRRDLDPVEI IPLYGSVELGPITGMSEAIVDL
VSTGRTLQENGLMEIEVLF DSSARLIAHPLSYRVNGDRLLDWVEKLRSVI"

gene complement(95213..96583)
/gene="glmU"
CDS complement(95213..96583)
/gene="glmU"
/note="ORF_ID:sll0899"
/codon_start=1
/transl_table=11
/product="UDP-N-acetylglucosamine pyrophosphorylase"
/protein_id="BAA10856.1"
/db_xref="GI:1001368"
/translation="MVAVAVLAAGKGTRMKSDLPKVLHQLGGYSLVERVLQSCRPLAP
ERQILIVGYQAAAVESSLAGRSDVEFVEQREQLGTGHAIQQLLPCLQDYQGDLLVLNG
DAPLLRSETLENLLATHQRHGNAAATLLTAHLDPDPKGYGRVFCNGDNRVTQIVEDRDCN
AAQRQNHVRVNGGIYCFHWPRLAAALPKLSANNDQKEYYLTEVVDYLDQVMAVDVDDYL
EINGINDRKQLAAANDILQNR IKDDWMAQGITLINPDSITIDDTVVLEADV IIEPNTH
LRGKTVIGRGSRIGPGSLIEDSIVGSDASVLF SVVSQSQIGDGCRLGPYSHVRGEADI
QANCRIGNFVEVKKSVIGAQSNVAHLSYLG DAMLGQRVNVGAGTITANYDGVSKHATV
IGSGTKTGANSVFVAPVQVGEVTVAAAGSVINRDVPAGSLAIARPRQRIIDNWQVPPA
PQSGQP"

gene 96826..97077
/gene="ssr1562"
CDS 96826..97077
/gene="ssr1562"
/note="ORF_ID:ssr1562
unknown protein"
/codon_start=1
/transl_table=11

gene
CDS
gene
CDS
gene
CDS
gene
CDS
gene
CDS

```
/protein_id="BAA10858.1"  
/db_xref="GI:1673329"  
/translation="VAFMSIATLTPLPSSGYDINMLKDEARLLAVEQGVSRHQPIYVL  
CQYIAREWVCEVELEERINDYLLRDCQIGDLMSCHEYWEND"  
complement(97143..98252)  
/gene="sll0898"  
complement(97143..98252)  
/gene="sll0898"  
/note="ORF_ID:sll0898  
hypothetical protein"  
/codon_start=1  
/transl_table=11  
/protein_id="BAA10859.1"  
/db_xref="GI:1001369"  
/translation="MTKATDEGTVIAVQANYYWVRLRNVTSSQPLLCTRRTRLKKVGGQK  
VMVGDQVRVELPPSLLLHGRSNTAPVPMVAEGDLGAIKVVYPRRTVLERPPVANAQEI  
CLVFALTDPPLEEWQLSRFLVQAEATGLEISLCFNKQDLVQETDVKFWGDRLLAAWGYA  
PIIISVENRWGVEKLQEKLSRISLMAGPSGVGKSSLINLLVPGVEQQVKNVSGKLRK  
GRHTTRHVELFDLPHGGLLADTPGFNQPDLAVEPAQLIHLFPPEARQQLTGQECFFKDC  
LHRGEPDCAVGQDWERYEHYLTFLEEVLAQQNPENSRETDTGLKTKTGSDGQEYDEPK  
LETKKYRRHSRRQEHQELQSFCQTDLDNLQEDWE"  
complement(98271..98525)  
/gene="sll1707"  
complement(98271..98525)  
/gene="sll1707"  
/note="ORF_ID:sll1707  
unknown protein"  
/codon_start=1  
/transl_table=11  
/protein_id="BAA10859.1"  
/db_xref="GI:1673329"  
/translation="MSLDNESILLDLRGTPCPINFVRTKLKLAQMAPGQCLEVLWDEG  
EPVQVPHSLELEGYTEQSLRALEGESAYCLTITVPATVP"  
complement(98522..99655)  
/gene="dnaJ"  
complement(98522..99655)  
/gene="dnaJ"  
/note="ORF_ID:sll0897"  
/codon_start=1  
/transl_table=11  
/product="DnaJ protein"  
/protein_id="BAA10860.1"  
/db_xref="GI:1001370"  
/translation="MPGDYYQTLGVTRDADKDEIKRAYRRLARKYHPDVNKEPGAEEK  
FHEINPAYEVLSEPEIRQRYDQFGEAGVSGGGAQGFVGNMGDFADIFETIFGGFGGG  
MGGQQRGRRRANGPTRGDDLRLDLQLTFQEAIFGGEKEIRIPHLESCQVCEGTGAKPG  
TG/KTCGTCNGAGQVRRATRTPFGSFAQVSACPTCNGSGEVIEQKCEACNGVGRKQET  
KKLKITIPAGVDDGTRLRVGKEGDAGLRGGPAGDLYVFLMVETDKHFVREGMNIIRSNL  
EVSYLQAILGCRLEVDTVDGKAELTI PAGTQPNTVLTLENKGVPKLG NATIRGDHLIT  
VKVQIPTRINSEERELLERLATIKGESHGKGGLEGFLGGLFHK"  
complement(99762..100265)  
/gene="sll0896"  
complement(99762..100265)  
/gene="sll0896"  
/note="ORF_ID:sll0896"  
/codon_start=1  
/transl_table=11  
/product="Holliday junction resolvase; RuvC"  
/protein_id="BAA10861.1"  
/db_xref="GI:1001371"  
/translation="MDQTEAAQRWLGIDPGLAIIGWAILDGQPDLSAHLVDYGI IETS  
KNLSTPERLVEIEQDIHVLLEEFSPQAIAMEMPFFSRQIKAAAGVQMALGVINLVIYR  
EKSIQPVFLHQSSWKCHLGNKANKAEVAAMVQNFFGLEDLPIDDSVDAIAIALAGLN  
GVRNDIG"  
complement(100270..101145)  
/gene="cysQ"  
complement(100270..101145)  
/gene="cysQ"  
/note="ORF_ID:sll0895  
gene:cysQ or amtA"  
/codon_start=1
```

gene
CDS

```
/transl_table=11
/product='ammonium transport protein'
/protein_id='BAA10862.1'
/db_xref='GI:1001372'
/translation='MVISSELLPNLDSGLTTLRTAGWGAMEILQSYYSQGNQTNLNANE
DKQDGPVTAADLAANQYILATLQATFNPEEFGYLSEETHQGNELPLQDWVWIIDPLDG
TRDFIDKTGEYALHIALTYRQRPVLALVGMPEAQKLYYAIQGGQCFRETKAGAITPVK
VKPKTELESLLVVSRSRHRDQRFQDLIDRLPFGDRHYVGSVGCKIVTILEGQSDVYIS
LSGKSAAKDWDFAAPELILTEAGGEFTYFDQTPVLYNRGDVVRQWGGILASNGSHHGAL
CEQAVEILAEILDQNN'
101578..102465
/gene='trpC'
101578..102465
/gene='trpC'
/note='ORF_ID:s1r0546'
/codon_start=1
/transl_table=11
/product='indole-3-glycerol phosphate synthase'
/protein_id='BAA10863.1'
/db_xref='GI:1001373'
/translation='MEIRRRPPNPPIKVDILQYQIKHPEAAPRHILEEIVWHKEKEVA
QRRELVLVLKQLQSLVKDMTPPLDFVGALRQSPRPALIAEVKKASPSKGIIRADFDPV
AIAKAYEAGGANCLSVLTDEKFFQGSFENLQLVRSQVQLPLLCKEFIIYPYQIYLARS
RGADAVLLIAAILSDKDLRYFLKIEGLGMAALVEVHTLEEMDRVLALDGVQLIGVNN
RNLQTFVTDLQTTEDLFAQRREQLTQGDITLVSESGIYELADLQRLQQAGARAVLVGE
SLVKQPDPPQQAIAALYGEV'
gene
CDS
complement(102486..104111)
/gene='amt3'
complement(102486..104111)
/gene='amt3'
/note='ORF_ID:s1l0537'
/codon_start=1
/transl_table=11
/product='ammonium/methylammonium permease'
/protein_id='BAA10864.1'
/db_xref='GI:1001374'
/translation='MTSIDTLWLLCAGLVFFMQAGFMCLESGLTRSKNSINVAIKNF
ADFGISVALFWSFGFSIMFGLSQGGWWTGYSFVDVGGEPTLAVFFLFQAMFCGTATT
IISGAAAERLKFSAYLLVAGLASGLIYPLFGDWAUNGLATVAGIETTGWLENLGFDR
FAGSTVVHVSVAWIGLATILVVGPRQGRFPKTKGTLKIQGSNMPFSVLGTLILWFGWL
GFNGGSTFGLTPEVPGIMVNTVLAVGGMLMAGLISLLQDKMIQVEPLMNGSLAGLVA
ITASANVMTPIAMVIGATGSAIAYLVGKKMLHWGVDDAVDAVAVHGGAGVWGTLVCG
LFGQLPLVDTGLNRWQQCGVQLLGIGVCTLWAFGLAVVFLTLNLRVFAIRISPEDEEI
GLNVSEHQATTETYELFQVMDRQAKTHDLSLRVPVNPFTVEVGHIAGRYNQVMDAFEAR
HHRSVEDLAQIYYVTAAIAAAIENNSFKADQLGLEEVNTRADELGALARTIQQMAEML
QQRDQELIAVKQQLVLQKQKHGNGESVDLSP'
gene
CDS
complement(104108..105178)
/gene='s1l0536'
complement(104108..105178)
/gene='s1l0536'
/note='ORF_ID:s1l0536'
hypothetical protein'
/codon_start=1
/transl_table=11
/protein_id='BAA10865.1'
/db_xref='GI:1001375'
/translation='MQDSNQRLKLGVLFFVVTLVLATLGYICFGWTTTEAVYMVVITV
FGVGYGEVRPLTTTAERVFTMGVILAGTTSVAVYIVGAFVQMVEGEIHRALGNQQRQR
QIANLTDHTIICGFGRMGQVLAKQLKQSGLPFSIIDNQPSQVAIAEELGYLAHCGDAT
REEQLQMLGVMRAKTLATVLPEDATNVFITLTARELNSRLTILARGEIPETERKLRLA
GADQVILPLTVGAVQMAADLITQSNRRDFLNRPDERGFLNDLLASVEVQMDLIVAPDS
PAMGRTIMEMEVRSGAFIVIALRRADGSTILHPHPSQILNENDTIIVIGHRSEIPRF
AEQYQFKRKQLKARWQEAALTP'
gene
CDS
complement(105476..106813)
/gene='clpX'
complement(105476..106813)
/gene='clpX'
/note='ORF_ID:s1l0535'
/codon_start=1
/transl_table=11
/product='ATP-dependent protease ATPase subunit'
```

/protein_id="BAA10866.1"
/db_xref="GI:1001376"
/translation="MPKYDSHLKCSFCGKSQEQVRKI IAGPJVYTCDECVELCNDIILDEELDVPPASTGERDGTGQKQKXSGQPRRELTLLEELPKPTAKQYLDSEYVIGQDEAKKVLSSVAVYNHYKRLNLLERNQEIDPGDAVELQKSNILLVGPTGSGKTLAQTAKILEVPPFAVADATTLTEAGYVGEDVENILLRLQVADLDVEEAQRGIYIYDEIDKIARKSENP SITRDVSGEGVQQAALLKMLEGTVANVPPQGGKHPYQDCIQIDTSNLFICGGAFVGL EKVLQRFGKXSMGFVRPGEGPSKEKRTADVLRQAEPDDLKFKGLIPEFIGRIPVMAC LNPLDEDALIAILTQPRNAIVKQVQTLTGMDHVELDFQPDVRAIATEAHRRTGARA LRGIVEELMLDMYELPSREDLTHCLITREMVEKRSTAEALLHPSSLPKPESA"
gene complement(106818..107498)
/gene="clpP"
CDS complement(106818..107498)
/gene="clpP"
/note="ORF_ID:s110534"
/codon_start=1
/transl_table=11
/product="ATP-dependent Clp protease proteolytic subunit"
/protein_id="BAA10867.1"
/db_xref="GI:1001377"
/translation="MVNSRSPYRSPLSTLGGNNIQSVVPMVVEQSGMGERAFDIYSRL LRERIIIFLGTPVDDQVADSIVAQLFLDAEDPEKDIQLYINSPGGSVYAGLAIYDTMQ QIRPDVVTICFGLAASMGAFLLSGGCKGKRMALPSSRIMI HQPLGGAQQQAVEIEIQAREILYIKDRNLNTMLVEHTGQPMKQLQEDTERDFFMSAEEAKEYGLIDQVISRPNLPDP TTPVTSUG"
gene complement(107798..109213)
/gene="tig"
CDS complement(107798..109213)
/gene="tig"
/note="ORF_ID:s110533"
/codon_start=1
/transl_table=11
/product="trigger factor"
/protein_id="BAA10868.1"
/db_xref="GI:1001378"
/translation="MKVTQEKLPDSQVGLEIEIPATASKKVYENVVKKLTRTVNIPGFRRGKVPRAIVIQRLGQSYIKATAIEELIDDSIKAAVKQEELPIIGNFSLRSDMENLIQ IFDPEAPLTIKVAADVPEAEYEPESYKKITAEAEIEYSADAVDQWLKGEQEKRTL VPVEDRPAALGDLAIVDYAAFQVAEDGQAGEAIAEVKGSDFEVTLEDGRFVAGIVDGI VGMVAVDETKLIPVTFPEDYPLEAVAGEDVLFIEIKLKEIKFRELPELDDDFAEVDSEFE TMAELKADLEKQFQEQAKQRTDDNIKAAIKKKLGELFTGDLPETMIKQECDRLVQTA MELERMGLDVSQLFQGGDMLQTLKDNSRPEATIANLKTDLMIGAIKEEKIQPTEAEV KERCDELQREFKGEKIDESRLNVFVSSSLTESKVLDDLKEWADVLLPEGSLSQTEED TPDDDAEEEAIVDVEATSDEE"
gene 109881..110723
/gene="asd"
CDS 109881..110723
/gene="asd"
/note="ORF_ID:slr0549"
/codon_start=1
/transl_table=11
/product="aspartate beta-semialdehyde dehydrogenase"
/protein_id="BAA10869.1"
/db_xref="GI:1001379"
/translation="MDGSFAKGCDDLVLASAGGSTSKRWAEIEITKAGAVMVDNSSAFRM VPEVPLVPEINPEAAQNHQGIIANPNCTTILMGVAIYPLHQLQPIKRIVVATYQSAS GAGAMAMEEVKHQSRDILEGKIPQAEILPYPLAFNLFPHNSPITANHYCEEEMKMVQE TRKIFAAEDIRITATCVRVPVLRAHSEAVNLEFATPFPVELAKTAIAKAPGVKLVEDW QKNYFPMMPMDATGQDDVLVGRIRQDISHPNGLDLWLCGDQIRKGAALNAVQIAELLVE RGWL"
gene 110783..111688
/gene="dapA"
CDS 110783..111688
/gene="dapA"
/note="ORF_ID:slr0550"
/codon_start=1
/transl_table=11
/product="dihydrodipicolinate synthase"
/protein_id="BAA10870.1"
/db_xref="GI:1001380"
/translation="MADFVSTSPFGPVLTA MVTPFNADGGVDYGVAEKLADHLITHGS

geneCDS

DGLVCGTTGESPTLSWEEHELFRTVWKQTVGDRVVIAGTGSNCTREAMEATQIARY
LGVDGSLQVVPYVYKPPQEGLLAHFQAIANCAPELPLMLYNI PGRTGISLAPETVYAL
AEVENIVAIKEATGSLEQASLIRAHTPDDFAIYAGDDVLTPLLLAVGGAGVWSVASHL
VGDRQLQAMVQHFAQGATAQALEIHLQLIPLFKILFCATNPPIVKLTALGLQGWPVGSFR
PPLCALSPGHTEQLRDVLRDLALLP"

112382..114304

/gene="slr0551"

112382..114304

/gene="slr0551"

/note="ORF_ID:slr0551"

hypothetical protein"

/codon_start=1

/transl_table=11

/protein_id="BAA10871.1"

/db_xref="GI:1001381"

/translation="MAKNTQTQALKILPLGGLHEIGKNTCVFEYDDEILLDDAGLAFP
TDDMHGVNVVLPDMTYLRENREKIKGMVVTHGHEDHIGGIAYHLKQFDIPIIYGPRLA
MALLRDKLEEAGMLERTNLQTVSPREMVRLGKSFVVEFIRNTHSIADSYCLAHTPLG
VVMHSGDFKIDHTPIDGEFFDLQKVAEYGEKGVLCCLSDSTNAEVPGITPSEASVIPN
LDRVFSQAEGRLMVTTFASSVHRVNIILSLAQKHQRKVAVVGRSMLNVIAHARKLGYI
KCPDNLFPVPLKAARNLPDQQQLILTGSQGEPLAAMTRISNGEHPQIKIRQGDVTVFS
ANPIPGNTIAVVNTIDRLMMQGANVIYKGKHQGIHVSGHASQEEHKMLLALTRPKFFVP
VHGEHRMLVKHSQMAQAQGIPISENIVVNGDVIELTGDRIRVAGQVPSGIELVDQAG
IVHESTMAERQQMAEDGLVTVAALSKTGTLLAYPEVHCRGVVMTIQPKLLEELIVRT
IENFLTERWSEFTHGSNGSTEVSWNALQKELESSLQRLIKRELQSSPMVLLMLQTDTP
IELDQVPQNVSTVSATSATPAPRKKVVLTKTPEPKVKAKPEKKVVTAEPSAQPVSTT
KVYRRSRKRSTTSVSS"

geneCDS

114389..115123

/gene="slr0552"

114389..115123

/gene="slr0552"

/note="ORF_ID:slr0552"

unknown protein"

/codon_start=1

/transl_table=11

/protein_id="BAA10872.1"

/db_xref="GI:1001382"

/translation="MSTVIPTSQEPVTLNEILEISISIAVKELDPTLVNEQFLKFSG
IVSNEWELNQQPVVSKAGSQLVFKNGLSIVAQPRSLTFLEGMDKTAEVVTVGKVASA
FVEKLPAQYNGVVVTPKCLIPDPDQNDGARKFITGTLLASGAWQDLGKAPVQAAVEF
TYLLEGCCQFNKVNQATLQIPDRQAVSALLFAGNFNYSLNPNPQERVSVAQYIEAW
QSDLDTRFGIVHEKFLAEQQPQTVFG"

geneCDS

115206..115811

/gene="slr0553"

115206..115811

/gene="slr0553"

/note="ORF_ID:slr0553"

hypothetical protein"

/codon_start=1

/transl_table=11

/protein_id="BAA10873.1"

/db_xref="GI:1001383"

/translation="MDTKPPRQRLIGLTGGIATGKSTVTDYLOQKYSVPILDADLYAR
QAVEPGSEILVAIARRYGPEILDQQGQLKRQALGEIVFNNAEEKQWLESQIHFPVGRG
FRSALAQLKQEQTVLLSIPLLFEAQLTDWVTEIWVVTCGPQQQVERLIKRNGLTEAEA
LARITSQMPLAEKVALADVLDNSGQIADLEPQIIKAWHHR"

geneCDS

115957..119067

/gene="slr0554"

115957..119067

/gene="slr0554"

/note="ORF_ID:slr0554"

hypothetical protein"

/codon_start=1

/transl_table=11

/protein_id="BAA10874.1"

/db_xref="GI:1001384"

/translation="MFCPYNETPRTLDMESCSGKTGDKMNLQEWRSQCVDDQLTRLN
VTPLLGDAPAOHLLYAEALQRRNDGRVSDGLMKRYAHVASGGWWCSDIDLLSGEKDLW
GCFKPDPRQDGESSKTIKYEHPPKPTPTGIFALRVPLHLWERIAAKAGVVLTEDQDP
DQPDLGFWQWLMGHPEIPLVITEGAKKAGALLTAGYGAIALPGVHWYRTPRDDQQQR
IGKCQLIPALGKLAAPGRQILIAFDQDSKPKTIQQVNLAIQRLGYLFSRQGCCEVKVLQ

WEHHLGR...DVIATGSGDYLVQV...KALPLEIWKAGRL...HSRDMVEEARLYLPPL
TIFAEKLIALQSPKGTGKTEFLARTVP...AQASHRPVTVIQRIPLV...ELCHRFQLPY
VGLSSSSPLARQGRFGGLCIDSLHGHSAQAQFDPEQWQDCLIIIDSEVETW...HGLNSDTC
RRQRVAILRNLKQLLQHSLSGGEGQIYVADADLTDVSLDYLSLSGIFLQPYVIRNHQ
PGLEEAWPIYHFGENDPKQLVKQLLHHIREGGKPFVCLSAQKLTSAWGTRNLEAYLKK
QFPDRRILRIDAESLSDPHHPAHGSLTNLNQVLADYDVLSSPAVETGVSIDLKQNHFT
SVWGIAQGIQTATSVCSLSRIRQNIIPRYLWAAASYGFNQVGNATAISKFLTACHRLT
EVNIRLLQSQSDLDNLDDLDGTGFAESLLCWAKMAVRINLAMVNYRESILGLLHQEGHQ
LLGPPPALPSLPVPPSPDPHPLSTVAPQPLQQAIEAVREQNYLADCCAIADAKPLKEL
EYQQLKKRLVKNSHERQRLRRYELAORYGIPVTADLVQKDDQNWYQKLRWHYFLTVGR
PFLGDRDAKARLLLDQGGQSLFLPDFNGSQLGAIIGTYDIIGIPILLAHQPRELCAI
DEDLIALGKLALANRDDIKTVVGIGLAKNASPITIVRRFLEKLGFGIQLTRTKTVERK
RVRIYQITCPQDGREKVFQAWLQGDRCQPGSSEQWMAEYWKKLQSSPRAEEQHQPFFVQ
LSLELG"

gene complement(119089..121284)
/gene="sll0529"
CDS complement(119089..121284)
/gene="sll0529"
/note="ORF_ID:sll0529"
unknown protein"
/codon_start=1
/transl_table=11
/protein_id="BAA10875.1"
/db_xref="GI:1001385"
/translation="MTVASTAPAFCCQIRFFGENLPDFDRYGQETAIASGAKAIAISSAN
DPQAVYQTLAALRYLTLLQTTASKESGHPGGFASIAEAIAALVMLGYNTVTEVGH
HAPGFYSTMFLDRSLEAMGINNVQELGDRFREMHGLLGLHLSGQIPGLLAPAGPLGGQ
HFAMAGAKLYPGVLPVTIGDGGLGEPYIMSSFHGFHTAYPQVTNPLPILVWNGFSQE
HHSMVSTQSNEAMVNYWQNGFKNVILVNAKDFDDSNQAGDFVDSTKFSFQORLAFTQ
AVLEATDKAAQAALGGTLTVLIVKQLKGAGVHKSGAKSHNLPGDSLDKQYIVSALQE
RALSPAWQLVRTNFERSHGGPASQTVVTESVLPLADLGTLPKEFALEDKQVATTAM
GELVTHVGKQDSNFVVTNADGNAASGINNVGLKIVHPTVDEDFQCPNGQVYEP
EDACAGLAAQAALFGGRTLWCSYESFAINGLPIWQTVTQAMAEELRRPTSTITLFTAG
ALSQGRNGWTHQRPPEIENYFAAMMRNGNIFPLPCDANGIQVCYDWALTTSNKGIPIT
ASKSPLPIRTTLEQNRQGLAKGGILLHNSTGSKTIVFAVIGDMTLIPVLEAASQLESE
GYGVKVVSVINPRRLYRPHDVQWQDCSEADSGFLSDAEFTELFGCDALIGVTGGSGAM
LEPVLLRSACPRDLFAWKRGETTASAGQLMAYNGLTAQALGDRAKALLP"

gene complement(121534..122673)
/gene="sll0528"
CDS complement(121534..122673)
/gene="sll0528"
/note="ORF_ID:sll0528"
hypothetical protein"
/codon_start=1
/transl_table=11
/protein_id="BAA10876.1"
/db_xref="GI:1001386"
/translation="MLSLSLGGQFMNNNIRVGSFLGIPFYVNPWFLLGLVLTLSYGO
DLARFPQLSGGTPWILGLITALLFASVVAHELGHSLVALAQGIEVKSITLFLFGGLA
SLEKESNTPWQAFAVAIAAGPAVSLVFLGLTIVGTQIPLPVPGQAIIGLLGMINLALA
LFNLIPGLPLDGGNVLKSIVWQITGNQNGKILIASRVGQGFGLAIAIGSLGILNLP
IGSFWTILIGWFLQNAGSSARNAQVKEQMEAFDAEAVIPNSPIIPAGLNIREFAND
YVIGKTPWRRFLVIGADNQLLGVLATEDIKHVPTSDWPQVTVDSLMQYPQQMVTNAN
QSLFEVAQLLDQKQLSELLVVQPSGEVVGLLEKASIIKCLQTSAA"

gene 122803..123459
/gene="slr0556"
CDS 122803..123459
/gene="slr0556"
/note="ORF_ID:slr0556"
hypothetical protein"
/codon_start=1
/transl_table=11
/protein_id="BAA10877.1"
/db_xref="GI:1001387"
/translation="MFSPSVYSEIIATLPPSVRLVAVTKTKAIADIEAAYGAGIRDFA
ESRIQEALPKIEALANYQDINWHFIGRLQSNKARKVVENFTYIHSVDNLAIKVLDR
AEELNKFPOGILLQIKLLPDENKSGWTREELKLDLPQLELLKNLKICGLMTILPLGLSP
GDRQLTFGELKNLATAINQSSLSLTELMSGMGSDYPEAIAAGATMIRLGTILFGDRL
"

gene complement(123461..123856)
/gene="sll0525"

CDS complement (123461..123866)
/gene="ssl10525"
/note="ORF_ID:ssl10525
unknown protein"
/codon_start=1
/transl_table=11
/protein_id="BAA10878.1"
/db_xref="GI:1001388"
/translation="MKLLLDTCWLWWFTEPEKLNEDAISQIIDETNEIWLVSASIWE
MSIKTSIGKLPENIDYILSRMVKLGAEFLDIKTRHALQVATLPLHHRDPFDRIII
AQAQTENMLLISADSMFKNYGVSLWAGV"
gene complement (123868..124146)
/gene="ssl1004"
CDS complement (123868..124146)
/gene="ssl1004"
/note="ORF_ID:ssl1004
hypothetical protein"
/codon_start=1
/transl_table=11
/protein_id="BAA10879.1"
/db_xref="GI:1001389"
/translation="MIGVSVNPEKLGSTMETVNVDQIEINLPELLYSIKPGEEVIVAD
QGIPIAKLVPLQRQKSVDRCSSLGVDRLGVVPPDDFNDPLPNDIWPLS"
gene complement (124216..125559)
/gene="ssl10524"
CDS complement (124216..125559)
/gene="ssl10524"
/note="ORF_ID:ssl10524
hypothetical protein"
/codon_start=1
/transl_table=11
/protein_id="BAA10880.1"
/db_xref="GI:1001390"
/translation="MVVYASPTFGQGFWLPLPSRRAPHYFISPMTHSLRWVNALSTRP
SLERALDEAIAKVGQGGQWDLAIIFLSSSFASDAARLMPLVQEKLSVPNLIGCLGGGI
IGMENNATVQVEVEGEVALSLTVAQLPGVTVPFYVHGEQMPDLDAAPPQSWVDLMGVDP
ASGADFIILADPMTGGITDFLAGLDFAYPQATKVGGGLASGENVAMGGSLFLQSSDHPA
GRYGDGFIGVALAGNIRLGSVVAQGCRIPEPFVNVQGNRIITEIQGKDADSGTVVL
ETPLASLQKLIPTLSPKQELAQSSFLVGVASDEFKLTLPQGDFLIRNLLGVDPQGA
IAIGDRVRKQORLQFHLRDRETSADDLQILLRHYTEGEANQSSSTAIGALMFSCLRG
YGLYGTNFDSSQMFQYFPGVALGGFFCNGEIGQVGAQTFLHGYTSAFAIVHRAS"
gene 125687..128419
/gene="vals"
CDS 125687..128419
/gene="vals"
/note="ORF_ID:slr0557"
/codon_start=1
/transl_table=11
/product="valyl-tRNA synthetase"
/protein_id="BAA10881.1"
/db_xref="GI:1001391"
/translation="MTTSLPPQYEPTVTEAKWQTAWEEESHAFKADPDRPGEPYCVVIP
PPNVTGSLHMGHAFESSLIDTLVRYHRMRGDNLTWLPDTHASIAVQTILERQLKAEG
KTRDDLGREKFLERAWQWKAESGSTIVNQLRRLGVSVDWTRERFTMDEGLSQAVKTA
IKLYEEGLIYRGNYLVNWCSPASQSAVSDLEVENQEVDPGHLWYFRYPLTDGSGELVVAT
TRPETMLGDTGVAVNPHDERYAAMVGKTITLPLVNRPIPIVADELVDPEFGTGCVKVT
PAHDPNDFVMGQRHNLFFINLLNKDGLNENGDFAGQDRFEARKNVVQALEAQGFLV
KIEPYRHSVPYGDGRGKVPVEPLLSTQWFKIESLAQNALACLEDNSPNFVPERWGKV
YRDWLVLKLDWCISRLWVGHIQIPAWYVISETNGAITDHTPFIVAYDEAEALAKAKAE
YGPTVQLQDDPDVLDTWFSGLWPFSTMGWPEQTDDLAKYYPTSTLVTGFDIIFFWVA
RMTMMAGHFTGQIPFKDVYIHGLVRDENGKKMSKANNGIDPLLLINKYGTDALRYTL
IREVAGAGQDISLQYDRQKDESESVEASRNFNANKLWNAARFVMNLDGQTPQQLGLAP
GEDLELADRWILSRNLNQVIQQTREQIEDYGLGEAAKGLYEFIWGDFCDWYIELAKPRL
WNKEGGDVGTQRQLVARQVLAHTLDSIIKLLHFPMPHITEELWQTLHQAEGQFLALQA
YPTVNQSLVDPALLETQFALLIETLRTIRNLRAEAGIKPGAMVTVILQSENDQERQTLQ
LGETYIRDIGKVENLQVVSQLPPEQTQAIAGVVDTIQVLIPLSGLVDLDILRNKIQKT
LDKVTKEYESIEKRLSNPGFVNKAPEEVIAGAKESLNAAVQRQMLQERLKMGLG"
gene complement (128641..128952)
/gene="ndhE"
CDS complement (128641..128952)
/gene="ndhE"

```
/note="ORF_ID:s11051"
/codon_start=1
/transl_table=11
/product="NADH dehydrogenase subunit 4L"
/protein_id="BAA10882.1"
/db_xref="GI:1001392"
/translation="MHLQLQYCLILAAALFCIGIYGLITSRNAVRVLMSEIALLNAVN
LNLMGFSNYLDPNSIRGQVFAIFVITIAAAEAAGVLAIVLAIYRNRETTDMEQFNLLK
W"
gene complement(129092..129688)
/gene="ndhG"
CDS complement(129092..129688)
/gene="ndhG"
/note="ORF_ID:s110521"
/codon_start=1
/transl_table=11
/product="NADH dehydrogenase subunit 6"
/protein_id="BAA10883.1"
/db_xref="GI:1001393"
/translation="MNLAEGVQYISFLILAFVLVIGAALGVVLLSNIVYSAFLLLGGVFL
SISGIYILLNADFVAAAQVLVYVGAVSVLILFAIMLVNKREDFSKIPGRWLRNVSTAL
VCTGIFALLSTMVLITPWQINETGPFVENTLVTIGKHFFSDYLLPFELASVLLLMAMV
GAIILARRDLIPELSEENKTATALTLPERPRLTSASK"
gene complement(129783..130364)
/gene="ndhI"
CDS complement(129783..130364)
/gene="ndhI"
/note="ORF_ID:s110520"
/codon_start=1
/transl_table=11
/product="NADH dehydrogenase subunit; NdhI"
/protein_id="BAA10884.1"
/db_xref="GI:1001394"
/translation="MFNNILKQVGDYAKESLQAAKYIGQGLAVTFDHMSRRPITVQYP
YEKLIPSERFGRGRIHFEDKCIACEVCVRVCPINLPVVDWEFNKAVKKKELKHYSIDF
GVCIFCGNC EYCPNTCLSMTEEYELAAAYDRHDLNVDNVALGRLPYKVTEDPMVTPLR
ELGYLPKGWIEPHNLFGKSQRAGQHPEDLVKAE"
gene complement(130475..131593)
/gene="ndhA"
CDS complement(130475..131593)
/gene="ndhA"
/note="ORF_ID:s110519"
/codon_start=1
/transl_table=11
/product="NADH dehydrogenase subunit 1"
/protein_id="BAA10885.1"
/db_xref="GI:1001395"
/translation="MTSGIDLQNSFLQSLQGFGLPPLGLAKLFWIPLPSILMIIGATVG
VLVVVWLERKISAAAQQRIGPEYAGPLGVLPVADGIKLVFKEDVVPKADPWLFTLG
PVLVVLPLVFLSYLIVPFGQNLVITDINVIGIFLWIALSSIAPIGLLMSGYASNNKYSLL
GGLRAAAQSISYEIPLSLAVLAIVMMSNSLSTIDIVDQSGYGILGWNIRQPVGFLT
FWIAALAECEERLPFDLPAAEEELVAGYQTEYAGMKFALFYLGSYVNLVLSALVFSVLY
LGGWDFPIPLENVANWLGVAPTTSWLQVLMALGITMTVLKSYFLIFIAILLRWTVP
VRIDQLNLGKFLPLVALANLLITAALKLTFPMAFGG"
misc_feature 131848..132106
/gene="pyrD"
/note="old_protein_id=BAA10886.1
partial CDS location, complete CDS reported in Acc#
D90916"
gene 131848..132106
/gene="pyrD"
```

BASE COUNT 33524 a 33080 c 32212 g 33290 t
ORIGIN

```
1 tactggggcaa tactcacagg aaaacacctt tccattttg cctcttccc agaaaaaac
61 cgccccggag gacggtaatc agattttcgt gtgtgaggag gaaatcgctg cgagttctgc
121 ttattttctta acctcactgt atctacgatt ctaaaccaaa atttagggcc ctccactcac
181 ccgattgagt gaatcgcggc gatcgcttag atgttagact tgctcggac ccacgataa
241 tgtcacctta accaacacat tttccaaatt aatcgaccat ggccaagggc aaggcaaaagt
301 cggaaaaaga actttaacct tccgtcttga ccctaaattt tttctgttca tgggctgctg
361 attttgccgt ttccattgca tcgaggagtc ctttttcggg ggaacgctcc ccaataccta
421 tatccgccgt aatctttccc tgctcaaagc ctagggctaa cttttcccga ataaaatctg
```

481 cctgggctaatt atgggaactca atacaaagaa tggcaaatcc cctctcccca atggggggcag
541 asaagtcctc ctggcgacaa atgggtttcaa tgatctctggc agcccggtgc aagattaaagt
601 cgttaactagg ctcttccctt ttgggctccg ctgcttccac ctcaacaata atgacactga
661 ccggaagacc aaattttctga cagcgaattt cctcactggc taacaacttt tcccagcccg
721 aaaggctata aaaaccagta gttccatccc gttccttcag aagttgttga tactcttccc
781 gccgggaagc tatttccgct ttgagaaaaa aactctaggat agtactcagc agttggggcga
841 tgagctccac caaggccaac tcgtccacca aactatcggg ctgaatttcg ggatcaatgg
901 cacaaagggt accaaatagg gaaccgttac cataggtgat gggcaccccc acataggctc
961 cgatgtccac ctgctggggc atgggggcat tgcggtaggc ttccaccaag ttcgattggg
1021 gagcaatatg gggctcttct cccctcacca tgcgggagca aaaggaatcg ggccaatgga
1081 acacatcccc tcgcttaact ccgtaaccat tgtcctgagc ctggagtacg atccagttat
1141 ctacctcggt ggggtgac atccacagg atagcccat tcgctgatgt aaatagggtca
1201 atgttgccct ggccgcacta tcaaaagtcag gaaaggaagt ggtggtgaac atcggcttgt
1261 cggcgcccta ggatggattg gtagattctg ttaattcggg aagttgagag attcgggtat
1321 ttgcttggca tattcccaaa tgattgtccc tgcctccatt ttagctatgt tgttgttatg
1381 ggacataaaa aaacctcccc acaggaaggt ttctcgccac aatagggtcag gctggcatag
1441 tctatagatc gccgcctcgg aaggttagca caaacaccac cgcgggcca gcaagaacaa
1501 tcaggcccaa aaaagtcaac tgaaaaatag gttctaaatt gagtgcggct aataattcca
1561 taatttctcc tgttaaaaac tgttggttag actcaacgta agcaaggata ataaaaccaa
1621 tgtctataat agctgggttg gtttctgccc ctggacttgc cgtcataaaa atacataaag
1681 ttatgtgaag aaggagaccg gccatggcaa cttggtattg catgcaggga tgtggcgctt
1741 gttgtaatct caccocagaa gaccggccgg agttggccga gtatctcgcc ccggaggagt
1801 taacctctta ccacagccta gtggggcgag acggttgggt cgttaattac aaccacggcg
1861 atcgccctct ccagatttac gaagataggc ccagtttttg ccgggtgaaa ccagataact
1921 ttgcccggat gtttggcatt gctccggcgg agttcgacga atttgctagc cattgctgtg
1981 aagaacagat tgaaggagtt tatggccccc ggagtgggga attaaaaagc tatcgccagg
2041 gattaccgaa gtttgaggtg gatagccatt ttaagctat ttttaactgt tctcgatgat
2101 ttcggctggg taaacggggg ctaacaactc aaagaagcgg taatgggcca gaccgtccag
2161 aataccggcg gcgtaacgtt tttcgaaaaa ataaatcggg tcgatctccc ctagattaga
2221 aagttccctc tggtagcggg tagccacgac gacggaagg gtgttaccac gcatcatatc
2281 ttcgtcggc cccgatcttc cggcggtgaa aacgtgctcc aggggaatat tccactgttg
2341 gctcaaccaa cgcacagcat agccttttga agctcggatg ggcagaatat ccaaaaattg
2401 accaaaggaa atgatgggat ttacggtttg tttcccttta tgcaacagtt gccgaatttc
2461 ttctaggtta ggggcgatcg ccgcatcgta gaaatagcta attttatagg cgtcagttc
2521 ttccttgggt tggagggtta aaccgggtta tttcccaaaa atacgcacaa tggcgttacg
2581 gttccacaaa taatcaatgt gattgcgcca actctggtcg gggatcaaat ccggggaaga
2641 ataaatttcc gtgcccattg tgggtatcaa catatccggg tggggaatgc gatactcccg
2701 caaaattttc agcaccgaat ccaatcttct cccagtggca atgcaaaagc cgacattttt
2761 tcgatgttga tacagcactt ccagtaattc gtccaacgtc tggcgatcgc ccggtaatcc
2821 cccctgtaat gcccccagta aattttgggt caaactagta accagggcac cgttatagta
2881 caaagtcggc cgcgccttta aatcactcag tttcagcact ttccagcact gaagtctgtt ggttcagagc
2941 gttgatgggt tctaaataac tttcaacgtg ggaaggccaa gaataatggc gcttaactcc
3001 ctctagacca ctttcagaaa ggaattgcca ttgttgtttg tcgtttagta ctttgagcaa
3061 tttatccgca atatccactt catcgagggg attaattaga tagccattct gacaattttt
3121 gataatatcc accgggcccc catcctccgt ggccacaatg ggcacaccac aggcgcggc
3181 ttcaatcaaa gttaaaccaa agggttccgt caaagccgga ttgataaata ctcccgtgga
3241 taaagcagtg aggcgaaaca aagcatacac atcctccgcc tgattctgtt tggggttagc
3301 cactttggcg tagagatcgt aacggtcaat ggtcaacagt aaatccgtca gtacttccct
3361 cgcctccctg tctagatccg tgatgtcatc ccgattgccc gccacaatga ccaaattggc
3421 ctgggcctgt aactgcgggg actggccata ggctgcaatt aatttatgga tatttttgcg
3481 gggatccggg cgggacaaaag cgaggataat aggttacggg ggtatccgta gaaatcgttg
3541 caactcttga acaatggggc tttccactc gttccctttg gggggataaa acttttctaa
3601 atcagtgccg gggggaataa ccaacatctg tctgtgctgg taatagtcgt attggcgta
3661 ctgttctgcg atttctgat gggatctggt aatcacctc gccgctgatc ctagggtttc
3721 ttctcgcgg ttaatccggc gggccatatt gtaacggctt tcaatttcgt cggctttaat
3781 cccactgagc aggagacggg tgcgcttact acgaccagg gaatgtccgg tgtgcacaa
3841 aggaataccc aattggtgag aaagtctggt gccacgtaa cccgcacgg cgtaatggct
3901 atggatgaca tcgggcagtt cgggtctgtt tttagatag tccagggcac ggtcagcaa
3961 attatccaaa tagtcccaga gcatttctt ggcaatatat tctccgggc cgcactcaat
4021 gcgaacaatc tgggcccgat gggcaataag ttctctaggc tgggcataat ctgcatctac
4081 tttgggatct ttaattaaac gggtcagcaa atccaccctg gccacctggg gattttttac
4141 caaggcccg ggcagttcca gcacatattt ggtttgccc cgggtgtcgg catctctgcc
4201 caactcaagg ttttctcccc gaattaaacc atggacacta attagtaaaa tgtattttga
4261 tgaatagctc ataagtttta caaattacta tcaatgtctg tgaggaatgt cacagggtac
4321 catggcgagc attttaacgc ctgcaattta tcaatgtttt ctccagttc tgttagaatg
4381 cccccaatct tcgtcccaaa tgttccgatg acctatgtta actggcaggc cctggccgca
4441 atctctgagt tacagcccta ttttgccgaa gatgttgctg gctttcagca acaaattgaa
4501 caacatttgc cgggattagc ggcgatcgcc cctgaagaat tagacaactt agcagttttg
4561 cgggtactgg aagtctctaa tggtgtttt cagtgggctt tccgtcgcca agacgaactt
4621 tgtttatcgg tggaaacaaac cagggaatgt atgcaaacgg taattgtttt taattaagtt
4681 aaaaaaattg cctgtcccag tggcaaaaatt attgctttca cccggcgat cgaacaatta

4741 atcgagga...a caacccca...atctacccaa gctttccaaa aaaata... aactgcca...
4801 caagatatac aagccctatcc ccttgcacaa cttaactgca atggggggga tggcccaac
4861 caagcccaag atctagtggg acaagatctac agcctctcac ttacacccca ttttgtctg
4921 cgggggaaaa atttatattg aactacacta caagccatta ccccttaggt agttctccag
4981 tgtgcacaaag cttcacccgtg gagtgcagtat tgcgggttcc caggcttaca acccattatt
5041 ttgaaaacaga ttcagggtat tctcaactt ccttggcgat cgtgttccca attcacagca
5101 gaagatcggg gtcgagcaaa aacaccgtca acttttccga cttttcttcc accaccatca
5161 catggctggc cgattggaga gtgtcatttt ggcgataaga atcggggcaat tgacgaattt
5221 gtcgggggcaa cacatccagc aacgtggggg cattattaac caagagacaa aattcttccc
5281 cactccgatt tttagtcaaa atgaaatact gtttcgttga cgtcgtcggg ggctggggca
5341 ccccaaaaaa agggcgatat aggtccacca tgggtgacaga acgattttct aagttccca
5401 atccggtggc tgacagacca ctgccatggg caggggccatg gggcaaaaatt tttaccacta
5461 gggcaatggg tagggccaag ttaagttttc ccacagcaaa aaggagaaac ttttccggtc
5521 gaaccgaggg ctgaccgacc tgaacagagg catcaacaga ggaagaatga agcggccatg
5581 tggggaaaaa ggaaaatgat aactgttaat taactgctga ccgataacag gctagtgcc
5641 agaagctctt gcactgtctc gaggaactgt tgctcaatat agggcttggg gaaataggcg
5701 ttggccccc aaggtcttggc taactgtcgg tgtttttcac tgccccggga agtgagcatg
5761 gccacgggaa ttttgagtag atctggattg cgtcgcggtt gcccaaggaa ctcaaagcca
5821 ttaaggttag gcatttccac atcacaataa atcaaatcca cctccccggc ttggggccagt
5881 gtcttcaggg cctcctgccc atccttagcc tgcacaccc ggtaaccaga cctttccagg
5941 gtgaaagcca gggtagccgc tagggccgcc gaatcatcca ccaccaaaat cgttttggcc
6001 ctccgcctgt gagtgggaag aggttccacc cctccatcgg ccattggccaa attgtctgtt
6061 cctttttgcc agtgccattc caacagcaac gccccattca ccaccgggat cagggtgcca
6121 tctgccagga tagtagcccc ataaaggtag gaaggggccg gtagcagaga cgaaaagggt
6181 ttaattacca attcctgttc cgtcaccaaa cggttcactt ccagagcgta atattgtctg
6241 ccgagccgca gtagcaccag gggtaaattg caattatctg gttggggtag cgtgggtcaac
6301 aacttaactag tttgttgtct cgacaaaagg cagtgaatgg gcagtaattg gctcaaggaa
6361 taaatccggga tagtcaactc ttgccaatgg agaaagcgtt gtccccactt ggttttgatc
6421 tgtgtgcgcg tcgggtaccat caactccgcg acactatcag aaggaatggc gatcgcggt
6481 ggagccccc ggttttgccc caccaaacac accagcaact tagcaatggt gagggtcagg
6541 ggtaacccgca aggaaaacac cgtccccgcg ccaggggcag aagacaccac aatgggtccc
6601 ttcagcgcc ccaactgttg ccgcaccaca tccagcccca caccgcccg ccagcccg
6661 ctacactggg ccgcgctaga aaagtgggg agaccccggt ccaccgcccg ccgcagaatc
6721 gttaacccgt gccctgtct cccagtaacc cgcatttcaa tgatgggtctg attgcccgg
6781 ttttcccggt tcagcccgcc tccatcatcc cgcatttcaa ccattggccaa ccgggtcccc
6841 tgataggcat ggacctcaat ggtccccatg gccggtttcc ccattggccaa ccgggtcccc
6901 tcatcctcaa taccatgggt caacaacac cccgtgccat agcggggaa aacgttgcaa aatttcccc
6961 ttttccaaag ccaaacgata tactagccat atccctgagc agccggggaa aacgttgcaa aatttcccc
7021 ttatttaaact tactagccat atccctgagc agccggggaa aacgttgcaa aatttcccc
7081 aggggcaaca tccggggcca catcagctca tcccgcaggg aaaatagcat ctgcttttgg
7141 gcattccactg tttgattggc cgccttgaa aatagcacca catcatccac ggccctctcc
7201 aactgcatca tttcttccaa aatttccctg aactggggcc atagggtgccc ataggaatcc
7261 atttccaggg catcgaagtt atgctctagc catccctggg acctgggtg ggcgcgcaac
7321 atcgttcccc cctccggccg gattggccaa tggcccgcca actgcccag tttcagcgcc
7381 attgtctgga aggtgccaac acgttggccc agggctccca cagccggttg caattgtctg
7441 ttttgtaaa acaggctatt gcgattaatg gccaatccc ccaccaatt attcatccgc
7501 tccaaccgtt gaaaatccac ccggatggaa agattagctg gattttgtct cctgggcatg
7561 gcccgcggtt catgggtgcg ttccacggga ggagccggag ctgccactgc ctctacttca
7621 gcctggggaa tggctcgtgg ggtcgttctg aaggggggca aggaatcaaa ggcctctct
7681 accgcctgca ccagagataa cgtttctagg gaagcatcga caaaatccac ctgagccacg
7741 ggagaaaagg atttcttccc cagtccatcg gcggtcaacc cgccaaaaac atcctccagg
7801 gaaggaggcg attccaccgt ttcagcctct acggtgggtt gttctaggat tggggacact
7861 tgctgctcgg gctgagattg ccatgaccca gtcattgggt tagtgggggg agaaggttct
7921 tctctagct catcttctgc atcaccaaaa aatagatccc ccaggactcg agccggagcc
7981 gaagtgtggt ggggcccggg tcttgcggga gcagcaagcc tttgacccag gcccaaaagt
8041 tcggtacttg cttcccctcc cgttggcgga tcgccatttt ccaacacttg ctgagttagca
8101 acttgccagt ctgccaagc ctgattagca atagtagaga cttgttctgg gttggcttcc
8161 agggcctgat gcaccgccgc acaaatcccc tggaaacctg gcaaatcaaa aatttccgct
8221 agccccagga aaatttccgt ttgactgggt agggcttccc gcagggttcc cggggcccgt
8281 tgccgagctt ctgtcacccg cgccatgccc ccggcaatgt ccacctcgaa ttggacgccc
8341 accacatcta ccccaaatc agcagagctg ggttaggata gggccctggg cgtctgcca ggccgtttct
8401 actcccaacc gttgctctag atttaggata gatttgttgc tccaaggggt tccgcagaca gtcaaaccct
8461 ggatcatagt acccctggtc gatttgttgc cgtttgttct agggactacct ctctgctata gagcgcttg
8521 tgcaataaca gggtttccat cgtttgttct agggactacct ctctgctata gagcgcttg
8581 aaaatgtcct ctagtccgtg ggcaatatgt ttaattgttt ccaacccac actggcgct
8641 ccccccttga gggaaatggg cgcccgcata atgccatgga ccaccgccg tgagcggtct
8701 tgaccaatgg tcaacaaccc cgtttgcgatt tctttagca gtgttggcgc tcttcaatg
8761 aaaaatcgat aggcgggttc ttctagattc acccgttctg gcccaggct ggggtggcga
8821 tcgctagcgg gaatgtcccc tccccctggc tggaaatgca tctccgtcgg tgtttctct
8881 catgccgcaa agacattttc ctccgctgtg ctaatggccg taggaatgtc cccagctcc
8941 ggaaagtcca taccceaaaa ttcttcccc acttccccac cgccaaacac tctctcaac

9001 cccggttatgg cgggttaaat cgggtccccc tgcgggggga cccatggcga caggggttca
9051 ctcgggttct ctcgggttct ctcgggttct ttcgggttct ctcgggttct gctatgttgc
9121 caatttttcca cggccactaa tgcataatcc ccgacagata acccaggatt atccaaagccc
9181 tgcggccacca gatctgtaat ttccttaaat ccaggcgaat tgagaatctc cgccagcccg
9241 gcaaaaattt ccgtctgggc cgccagggtt ccccgcaacc tttcttcgtc atccccagcc
9301 aacgcctcgc caatctctgc caacccttgg gcaacgtcca cctcaaacag gtaggccaca
9361 atgtccaccc ccaagtccgc agagctgggc agaaactgtt cccccgcgc cagatgttcc
9421 cccaactgct cctcaatggc cgcaatcacc ggcaaccctt gcaccaaacc ttcagtatgc
9481 tccaactgcc ccgtttcaat ctgggtgggt aggggttgtt taagataatc gaacccttcc
9541 aagagcattc ctccaacct gtcattccac accaccgcac cgctatagag cgcttgaaa
9601 atgtcctcca gccggtgagc taattcttca atggccggta gttgcacact ggccgccccg
9661 cccttaatgg aatgggcccgc ccgcataatg ccatggatct gggctgggtg cctctctccc
9721 cgcaactcca acagccccc ttcatacaca ctgagcaatt ccggtgcttc tccaatgaaa
9781 aactggtagg cgtgggtcac aatgtcggag ttgagcatgg gggcaaaggg gaaattaagg
9841 gttagatagg agggtttcag ctagtgtgtg ccaatattgc tgggttgttt ccaattgttg
9901 gtgatggcca ttcagtgtgt ggttgccttc cctgatactg ccggtcaatt cctcgcctg
9961 ggactggatc gtcacaatta aagcctccat ggccgcccgt gcttcgcccg attgggcccg
10021 taaactccgc acttcgtctg caattaccga aaagccccgg cctcctccc cagccggggc
10081 cgcttcaatg gacgccttca gggccaacag atgggtctgg gccgcaaat ttcgaatcaa
10141 attaatgtct ttggcaattt cctgggtgga actatccaac tttccagtt gttccccctg
10201 ggtggccatg gttagccctc cactacgcac ggtttgcaga ctctccgctt gtccttggt
10261 aatttgccca gacagcatgg ccgtctggtc ctgggggggt tggatttcgc ttgcaatggt
10321 ggacatatgt attgaatgtc ggttatgggt ttagttatcc atttggtcag atcactgcac
10381 tttgaactgt ttaaccgcct cttgcaatga ctgggccact gccaacagtt ccttaaagg
10441 ggcagatacc ccactcgctt cactggagtt tttatccgca atctgggcca ccagagccat
10501 ggtctgggtc accgattcac tggtttggga ctgctcaatg gccgcagagg tgatcgcttc
10561 caccaagcca ctaatctggg cactacccgc cgtaatttgg ttcaagctcc gcctgggttc
10621 ttctaccaat ttggttccca ccactacctg ttccgtggcc gcttccatgg cattcactac
10681 ttcattcggt tccgcctgaa ttgtcgccac caattgggca atttctgcgc ttgctccgc
10741 tgattggcgt gccagggaac gtacttcact ggctaccacc gcaaaccacc gtccttcttc
10801 accagcatgg gcggcttcaa tggcagcatt tagggctagg aggttgggtt ggtcagcaaa
10861 gctgccaatt aggttcacca ctttgagat ttttgggat gattccccc atcgttccac
10921 ctgtttggcg gtggcgccca ccgtttcccg aattgcgaca atgccatcca cgggtcggtt
10981 catggcatct tccccttggg ccaccgtttg ggtcgcccg tgtactgctg attctgcttg
11041 ggcagcattt tctgccactg cttgaatgga ctgttccatg gcctgaagcc gctccagggc
11101 ctctgccaca tccaaggcct ggcgattggc ttgctgggct agttgcgcga gttccacttc
11161 gttgggtgtc gtgggtctcag taaattgact agcagcggtt tgtacttggg ttacaatgcg
11221 ccgcagactt tcaatagttg cgttgttaga gtcggcgatc gtgccaat ttcgctcggt
11281 cactgtgggt cggatgggtc agtccccctc actgacaggg tctacctcca tcagcagttc
11341 caaggccgcg ttttgcaatt tttcacgcac ttgtcgttgt tctacttcgg cgattttctg
11401 ttgggctaag aggtcggagc gttctaaagc tagtccacc tgcacagtca attggccaaa
11461 taaatcaatt tcattctggt gccagtcctt cggcccgagg cactgggtgg cagtgaatg
11521 tcccagcaga ttgcctttgt agttgatggg ggcgacaagg ttggctttga cttcaaaggg
11581 tttagactgg ccaatgtggc agggggtcag ccggcggttg taaatatctc ggggtggctg
11641 gatactgcca gaacgggtatt tttctacata actatcagca aagcaggggt cggcaatggt
11701 ggcccccaag gctttgggat atccttctgc taccgattcc acaattactg tgccggccca
11761 ggtggcatcg aaccgataga caatgaccgc gtctgctttg agcgccagac gaatttcttg
11821 ggccggcgatg tcaaaaacct gctcgctgtt gatggcagcg gaaattttca gattcaattc
11881 ttttaaggatt tgggcttgtt gggcgctttc atttctttcc tggatcaggt tggcccggtc
11941 caggggtgggt tgtagtctct cggcactg ctgaagaaac tgtctttccc tcatttccca
12001 ctgggtggga cgttggcaat ggtgggcat gagcaggccg agggggtagt tatcccggtg
12061 tagaggtacg gtcaagctcg ctttgacttg atgttgctct aaccattggc gatgggggtt
12121 actgatactg gcaccgctgg tgtcattgat ggcaacgatc tgggaaggca tatcttctcg
12181 gccccaggga tggggatctt tgcgtgcaat taaacctga gtggttaagt ccaaagcttg
12241 cactaccatg gcttcaggct gatagcggg atggtagtaa aacactagtc gtcacaacc
12301 aaacaaagct ctggcttggg cgaggttctt ctgaattacg ccttgaattt cgtcaatgtc
12361 ggaaagggtt gcccggtata gttcgggtcag cagttctgct tgtttaaggg ataaatcctg
12421 ctgggtggcg aatttctcca cctgggcact gagagcatca atggtttggt cggcgatcgc
12481 cagttcatca ccggccacgg cttagaggtg gtcgaggttc cgggtgggat gcttagcttt
12541 caaggccagg gcggtttgag ctttggtatt ttccccacc atccagtagg caacgaaggc
12601 agccccacc gcggtcacca aaagcccaat cagaatttgg tcacggattt gcttagtggt
12661 ggagtccttg acctgttgtt ccgtttgggg cactggaagc ctgtccacac tgctgagatt
12721 gagccctcca atcacccag cggggatcaa accaattaac agggctatca acacagcttt
12781 attgcggagg gaaagtcctc cactttgggt aggtgcctgg attgaggtag acatcggaat
12841 caaattatcc gggctcggcg tcgccatgag gggagccagg ggttgcattg ggggttaactc
12901 caccttgggc aaattgatcg gggcgggcg ggtcaactct acggccgatt ggggtcagtc
12961 ggccagggca tccgtgtcaa tggcggggtt ggggttaggg gaaacatcct ccacggcggt
13021 attttctgct ataaaagcct ctgccatgaa ctcagcccca tctatctccg gtctctcggt
13081 caaattttcc agggaaacca atgtttttgc ttgtgtatct gcctggattc caggtctcgc
13141 ctcatccccg ttgatgtcag tttccttggc atcgctaaac caatccaggg catccctac
13201 ctcactttta tctctccat cgatgggtggc aaaagaagcg ctggtttccg acgattcgtc

13261 ctggggagga ggggtgga ggggtgga ggggtgga ggggtgga ggggtgga ggggtgga
13321 ggagagggat tgggagga tgggagga tgggagga tgggagga tgggagga tgggagga
13331 aacttaaccag ttagggaaca ttagggaaca ttagggaaca ttagggaaca ttagggaaca ttagggaaca
13441 atggcccttg ggtggagggt tgggagga tgggagga tgggagga tgggagga tgggagga
13501 aaacgtagt tgggagga tgggagga tgggagga tgggagga tgggagga tgggagga
13561 tgtagaaaaa tttagccaata attagcaaac tgggagga tgggagga tgggagga tgggagga
13621 aaaaatcaat aaaagttaac tgggagga tgggagga tgggagga tgggagga tgggagga
13681 agcttgggca tccaatacca catacattac ccttggaggg ctgacccaaa atcccgacac
13741 gttagggcga aggtctgaac caatgctggc ggcaggggga gattgaattt gatccgttcc
13801 acacagagga atgtccttta tgggagga tgggagga tgggagga tgggagga tgggagga
13861 cggcgatgga cttcgttggc tgggagga tgggagga tgggagga tgggagga tgggagga
13921 aaccgatag ttggtagggg aaccagattg gaggtgcca gagggttagc ctaaaaaagc
13981 gccaaaatca atcaccaga gacgtctcc ccgccaatta tgaaccccca tgggtccagga
14041 aggcattgtg ggaatggggg tgatttgtcc caggggcacc gtcagaatct ccgttaactg
14101 aaacagagga aaaattaagt tgggtgtctg ttccgagggta aattgcaaaa actgctggcg
14161 ggggacttgg atataccca gcatggtatc agaggaaaaa gtgttggctg gcaaaacagt
14221 tggcctaaa aaccgtccca ggggggaccg gaaaaatcaa tcagctttag taacagctaa
14281 ttcgtccatc ggctcgggca ttggttagcc ggaaaaaatt aaccggaaag aaagcatggg
14341 ggatataaag ttcagataaa ttgcttgatt accgtgttga actcctcttg gtcaatgggt
14401 tttagtaatat aggcgtccgc ccttggcgt ttgccccaaa atttatccat atccgtggcc
14461 ttagtggaa agaggattat tggaaacttt tttagtccgt ctttgtcttt caattctcga
14521 caaatttcaa aaccactgcg ccccgccagc acaatatcta agataattac gtccggcact
14581 gcctgggaaa gtttttccag ggcttcttct ccactgatgg cgggtggtag gttaatgctt
14641 agtttctgac aaaaatcact gataattgaa cgttctgtag aggaatcgtc aataacaagt
14701 ggcgtgcca taatgttgc tcagtgttta attagtcgaa aagtgaacgg taaatagtaa
14761 acagttatag atcctaaacc aaaccgcaaa agtattggcc tggaaatcaa ggagactcaa
14821 caattttccg gggcctcctt gggtaagttt attccgctgg cagcgatgac tgggtcatgga
14881 gatgtttttt aatagtctgc aaaaccatgt ccgggttgac gggcttactt aaaaaatctg
14941 tggagccgac cattttggcc cgcactcggg caacaatgcc atcattgccg gtgaggatga
15001 caatgggagt acttttgaag atggacaatt tacgcaattg cccacaaatt tcgtagccat
15061 tggcggttgg catgaccaa tggaggaaaa tcaaatccgg cttccggggc agaagaatgg
15121 cgatcgcccg taggggatca ttgattccta caaaccgata attggctgta tgaagaattt
15181 tttccatggt ttggcagatc aaaggactgt catccacaca ggcgatcagg ggaccactgg
15241 gcacatcagg ctgagccacc acgcccctca ctggggggcg aatgggcggg ggcaaatcgg
15301 gaattttaat caattccacc aaccccaact gtagataggg caacaaagaa gtggtcacac
15361 tcagcacatc tcgcttcac cgcaccgaca agtcccgaag ggactgatta ccatccagca
15421 actgtttgag ggtttggtat acctggggag tgggtgcgtt ctgtaactgt tccgcctgac
15481 gaatgatagg ggccgcattg ggggagcggg ctgcaatctt ggccccctgc cattttgctc
15541 ataactgctg ggattccgca atcatctgat ccgctcaat cagcaccagc ctagtggaaa
15601 gcaaatattc ctggcgtaga tcacaggcca cttccatgga ttgggtaatg tcaaacagta
15661 cttccaccac cgtggccgca atcagccgag cggcctgctc cctggtaact ttctgctgag
15721 ctaccagtg gcagagcagt tgatattccc agcaaatctg taaatcttgg ggatcaatgc
15781 tggccaaatc ggtttgcacc gagggcaggt tggcggaat ggggggcaga taggaagcaa
15841 tttgtcggcg ccaacggcgg acggagtgaa tcccccggt tcccccgggt atccgacca
15901 ttagagata aaaagacat tctcccccg ttgcaactgga gaggattagt tggcgctaa
15961 aacggggtg cttcagctca tcaaagaaac tggcctgctt ggaggcagta aattcctgaa
16021 ttggaactga gtgggaggag ggggtgggag ctgtcattta atcaaaggaa gaggcaggtc
16081 aacagcagga ggggggcata tctatagctt gccctgaaag gggtatgggt cgccaaagta
16141 cgcaagaaaa cttcatcgac ctaccgaggg gattgatccc tgccatcaac ggtgtaaatg
16201 ttatcgaca agattaaata ggattaccag aacttctcca gccaccatgc tccctactct
16261 cgttacaaaa aggagacagt tactaaggca aacgccccag acccactact tcaccgtgga
16321 ccccatctg cactaccaag tggcgatgac actagaactg aaatttcccc tctggacacc
16381 tttgcatatt caaggcttca ctgcttctgt ccatttgcag gacttccaag ctcaaggctc
16441 agggctctat ctggtaaggg aatatgagcg ccatttgcag gacttccaag ctcaaggctc
16501 cagcaacggc gaatatctag agcaccaaaa gtgggtaag gccatttggg ccattgctg
16561 tggagaggaa gaaaatattg ccatcttcta tgcatttat gccgatgaac taaccgtaag
16621 aaccaatcat ttggattata gtcattggtt cttcaccggg gcagcattgt ttttctactt
16681 gccaggacat acccacaggc ctctagcctt gaccgttgtt cctcccgaac cggcttgggc
16741 gatcgccacg gccctgccct gtaaggcaac ggattcaact acgggagcca aaacttctta
16801 tggccaggac tttgacacgt tggtagatag cccggtggaa gtggggattc atcgggatta
16861 cgcctttgaa acccagggtg aggagaccca ctttgtggtt tggggtgaaa gtaatttgaa
16921 tggggaacag ttagttagag atacggaaaa aatcatcgcc gttgaagcag gactatttgg
16981 gaatttacc taagaccatt actggttcat tctccacact tctaaccagg gctatggcgg
17041 cttagagcat aaagattcct gtgtgctgaa ctatgaccgc tttggcttcc gagatccgga
17101 aaaataccaa cgggttttgc aactgggtgg ccacgaattt ttccatcttt ggaatattaa
17161 gcgtattcgt cccatcgctt tggagaaatt tgactacgac caggaaaatt acaccccttc
17221 cctctgggtt tccgaaggca ccaccagtta ctatgacctg ctcattcccc tcagggcaga
17281 aattttacgat cgccagacct atttaaaaaa tttgggcaag gagattacc gttacctaaa
17341 gaccctaggg cgcttgggtc aacctttggc ggaatctagt tttgacgctt ggatcaaaact
17401 ctatcgctcg gatgccaaca gtgataatag ccaaatgtcc tattacctca agggggaaatt
17461 ggtaacatta atgctggatt tactgattcg ggaacgacac caaaaccage gttcctttga

17521 tgaatgctctg cgaggaatgt ggcaagaatt tgggggggaa gaaattgggt ctaccctggga
17531 acaattgacag gcagtaattt ccaggggtggc ggacaaggaa ttaactgaat tttcccatad
17541 ctatctccac accacggcgg aacttccccc caatgatrat ttgcaacccct ttgggttgggt
17701 tattaagccc atgcaggaag atttaactcc ctatttgggc attaagggtc aatccgagge
17761 cggccaggaa aaaattacct ttgtggcggc ccattccccc gccgccatgg ctggcattag
17821 cccccaggac ttgttactgg ccataaatgg tgtacgggtt ggttcagtta acggtgtttc atcaggatct
17881 gcggctgaaa gactaccaag ccaatgatat gattcagtta acggtgtttc atcaggatct
17941 tttgcgaacg gtggatgtgg tgttggcatt tccccaaaga aaccgttatg aagtgggtgcc
18001 catagccgac cctcggaca gccaaacttca aaatctggcg ggctggctag gtgaatccta
18061 atgccctgga aaacacgggt agcacactat tcccccttgg atgaccgggg ttaagtccag
18121 ggagtaggga gtacaagtct tttttttgat tttctgatgc acaagttttt gccatcgcc
18181 tactttgaag ataagtttgt cccgttttag gatgcaaaa tttccgttgc taccatgcc
18241 ctccactatg ggacggcggc ctttgggggt ttggggggtt ttcccgaacc ggaagatccg
18301 ggacaccattc tactattccg tctggaccgc catggcgatc gcctgagtaa gagtgcgaag
18361 tttttgcact acgacatcag tgcagaaaaa atcaaggaa ttattgttga ttttgttaag
18421 aaaaatcagc ccgataaatc cttttacatc cgtccattgg tgtacagttc cggtttgggc
18481 attgcccccc gtttgcacaa tctggagaag gatttctctg tttatggctt ggaatgggg
18541 gattacctcg ccgcccagcg agttagctgc cgtatcagtt cctggtatcg ccaagaagac
18601 cggagttttc cctaagggg caaaatcagc gccgcctaca ttacctctgc tttggctaaa
18661 acggaagcgg tggaaatcgg cttttagatg gctattttga tgaattccca aggttaaggtc
18721 tgtgaagcca ccggcatgaa tgttttcatg gtacggaatg ggcaaattgt taccctcgcc
18781 aatgagcagg acatcctcga agggattact agggatagta ttctcaccat tgcagcggat
18841 ttgggcattc ccacctgcca acgccccatc gataaatcgg aattgatgat tgccgagag
18901 gtatttttga gtggtactgc ggcaaaaatc accccggtta aaaggattga gaactttacc
18961 ctggggcggc atcgccgat tacagaaaag ttacgctccg tgttgacagc ggtgacggaa
19021 aaccgggaac ccaaatatca agattgggta tttaaaattc ctttgaatgg ctaatttttc
19081 ctggcaagat tagcgctttt aaactgaact taaagaatta gagttaacc c atgttggatc
19141 aaagccaagt tcaaaaaatt gccacactgg cccgtttgga aattaccctg gaggaagaaa
19201 gtcaatttgc ttcccagttg agcagcattt tggactactt tgaccaattg aacgaactgc
19261 ccaccgaagg agtggaaacc accaccaggg cgatcgagtt gagcaacatt gtccggggcg
19321 atcgccaaat cagtggggac ggagacaatg cggccaccac ccgccaagct ctgctagata
19381 acgccccgga accggaggga gacttttttc gactcccccg tattatgggc ggtgacgaag
19441 cttaattttag tctagtcacc aggtggagat taactttttt tcccgttggg tgatcaactt
19501 gtctagggag cctgccaat tttttcgtgg taggcccgtg gctcgatgta agtatcgacc
19561 cattcccccg gactgtggcc gtggtcgtga ccatgatggg gatgtccgtg gccgtgata
19621 tgaccatggc cctgattttt aaaagcaggg cgaaaacttac aggcctcaca attcatcgcc
19681 acctgtccca attgggtttc aatttcccg tcccgcacca acgccaataa ctccggttga
19741 atgcccattt ccgacaggga ttgaatttca atctcgggaa aagtggcccc ttgtcctca
19801 gtgatgggtg aaattttctt caccaaggca cccataaaca aaaagtaggg caaaacaata
19861 atccgcttgg gttgatataa cctcgcccg cggaaccctt cttctaagcg gggatggcta
19921 atgccaatga aacaggtttc tacagtttgg tagccactgc cttcccagag ctcggggcc
19981 attttatata catcacctgt ggcatcggga tccactggaac cccgaccac aaacaacagc
20041 accgtatctt ggcgttcaat ggcctgggga ttggcttcgg gactatccaa ttgattcaac
20101 cgtgcttttc acaaatcaag aatggctggg gtaatgccaa aatgacgacc gtgaaaaaa
20161 ttgatctggg gatgggcttg gcgactgcgg tctaactcat tgggtgacatc gaatttgta
20221 tggcggggcg caaagagcaa aatgggcaga gcggaaattt cctcaaagcc ctggctaca
20281 cattgctgca cccggcctg gatattgggt tccgtcaact ccaaaaaaca ggggatcacc
20341 gggcgggaat ggtctaatgc ttgttactgg gccacaaaat ctaaaaatgt ttggcgaccg
20401 tcttcgtccc tagtgccatg gccaatcctc agtaggggtc tgtgataggg aaggggggga
20461 agctcaagtt caggaaaaag ggaaacaggg gcgggcacac tgggttaagg cattagaatg
20521 atggactgat aaataacaaa aaaatcgagc tagggccact gaatccaagg cagtccaggg
20581 gattgctgga gaaggaccac aacggataac atccagacct agactagacc gccgacatag
20641 aaattgcggt aagttgattg ggcggtattg accccagcca tggctcata ttccagggtt
20701 gcttggtact ggactatgcc caggagagag atcagcaccc ctaagctcaa ctgttttcca
20761 ctggagcaaa gatgtttaag cttttgggca ggcatttaac ctccactgga gtagtaccaa
20821 tgatttcacc gtcaacgaca attttttgcg ggggactggg ggtcacttta atgttttctc
20881 catagagatg cagcacgttt tcattatcgc tgggattttt cgacagggca gaagtgaaca
20941 ggtagttac tacctgcaga cctgtaatg ccgtttgact actggccacg gtgatgtcga
21001 gcaaccctc ggtgaaggat acctgcccgt cctccctggc aaacacagaa gtgggagggg
21061 ccgcatggc gatcgtaatg gcgctagctt ccatgggtgt ggtttctgag tcaatttcga
21121 tgtgggttc aaacaactcc tgttccctgg cctgttgaat gccagcaaaa atgtaggcca
21181 tcacccccag attatttttc agttcccggt ctgctttttc caccatttcc gcctcaaaagc
21241 cgaccccggc caacaggagc atgggaatgt cgttacacag ggccgtatcc accactttgg
21301 tgatgccccg gttgatgggt tggcaggctc cagggatttg ggtgggaatg cccagttcaa
21361 cggaaaaagc attggcggtt ccccggggga taatgcccaa gggaaatgccc gtgttgacga
21421 gggcccgccg tacgcccgat acgggtccat caccgcccga ggcaatgata aagctatctc
21481 ctcccccgtc cgattgttgc ttggcctgct tgattcgctt aacaatttcc ttggcttggg
21541 cgggtgacgt gacttcggca ctgggtgaaag taatttttag attaatctcc gactgtaaat
21601 gctctttgat taaatctagc tcccgtccca cattgcctg gcctgccacg ggattaaaaa
21661 ttagatggcc agtttttagt ttacccaata gtttaatcac tgctttggcg gtggctaaat
21721 taatagctag gggaaacgtt tacacttcac aaagccttaa cagggtccgg atgtccggct

21781 cgtgggggttg agcataaagg aggtcaatca aaaaatgac ggcagttg gttccataga
21841 tgatttgggtt ggaatttggg gttccataga agaaaataga gttccataga
21901 ccaagccgggt tttgttccctt actaatccctt ctgtttgacc ggtggcgatg gttccataga
21961 gagagaaaaag ggatttatgg gtcaggacaa aattcaaccag agcgtctttt ttgttggcgt
22021 gggcgataaag ggctatatgg gcagccatgg tgtttccaga tgggtggagtg gagagttgaa
22081 gcgttacctt aaattcacag gttcagattc acattggtaa tggaaacagc ctttagccgt
22141 atggatttgg ttcagtctcc gggtattccc gtggttggac agtggattgt cgattccccc
22201 ggtacgattt cccctgggcca aggggtgggt ttttatectc cccctaacga ggtggccgtg
22261 ggggtggggg aaagtctgga gcaaaactct ctgcatcagt atcagccagt ggcgggtata
22321 ccaagcctaa tttctgcttt aacggaaaaag ttgcgacggg ataacgatat taacctgtct
22381 tccgaccaag ctgtggtagt aacggctggg gccaatatgg gtttttttaa tgcagtgtta
22441 gccattacgg aggtgggaga tgaaatcatt ctcaatacgc cgtactactt caaccatgaa
22501 atggcggtca gaattgcggg gtgtcagccg gtgttgggtg cccactgatg tcaatatcaa
22561 ctccaactgg acctcattgc ccaggcgatc gcccccgga ctaggggcgtt ggtgaccatt
22621 tgcctcaata atcccaccgg ggccatttat ccagaggcag atttgcgggc ggtgaaccaa
22681 ctgtgccagg agcgggggat ctaccacatc cacgacgagg cctacgatta ttttgcctac
22741 gaccagactc cgattttctc ccttgaggcc atgggggata gtggaggcca taccatttcc
22801 ctctacagct tttcgaaggc ctatggcatg gccggttggc gggctcggcta tatggtcatt
22861 cccctggaac tattgctagc ggtcaaaaaa attcaggata ccaatctgat ctgcccgttg
22921 gtggtttccc aatatgccgc ccttgcttgc ttacgggtgg gcaagaatta ttcagcccaa
22981 tttttaccgg agatggctgc ctgtcgcag caactattag aaacctagg tcaattgtct
23041 gactattgtc gtttagtggt gccccgggg gctttttact gtttgcctga agttaatagc
23101 cccctgacgg atttagagct agtgaaaagg ttaattgatg aatttaagggt ggcggtgcta
23161 ccaggttcca cctttggcgt ggattcgggt tgctatctcc gtattgccta tgggtgctctg
23221 cggcaggcca cggttagcgt tgccattgcc agactggagc aggggtctaa aagtatctgt
23281 tgatttagtt caggtttaag gattattctc gtttttttgc ggtaaagtct ttgctttgta
23341 gaacagttct aaactttggc gatcgcgcac gtaacgcaa tggcagggtt cgtaggcaat
23401 gccctgggga ttatccgggg gaaaagacaa ttcaaaactg tatttggccg cattattttg
23461 gagccaatta aaggctttcg tttgggcaaa acttgcactt aaatgagtag cctgggcact
23521 gccatgccca atatccaccg catagccggt gtgatgttcg ctgtaaccgg ggggggcact
23581 gacttcggcc cgctgtcgag cctcttgatt gcgctgttgt ttgatgtcaa aaaaagtgtg
23641 ttctctgctc gtcacagtgc gaaaggcgga aatggggaca agggaaatgc cctaggcctt
23701 ggcataccgt tgcataagca aaaattgggt agcggcgggc tggcgtaact ttaaaccggc
23761 gtccggggta atatttttca actccccag gggagcctct tcatagggca agtgccccaa
23821 caggttatca atgggggttg ccgtgggggt gggacttggg tctgtcacca cttccgggtg
23881 gggctcgggc ctggggccaca gggccaacaa cgtcaataaa gccagaataa ttatcccaa
23941 gccggccggc attaatttca ccgggatggg ggacaagggt tgggactggg ggcaccccg
24001 tggattgtcc cgaattactt ccgggatgtc atctcgggtg acgttaaagg aagatttttg
24061 ttttttacc atgcagttgg cgatcgttgc agctcattgc ttggcccat tgtgccagag
24121 aatgttggcg gtcacaccg tacccccaa tctaccgta ggcgatggg acaggcaaaa
24181 ccagaaaaag cgacggcggt ttggaaggc atgggcagta aaccggtaa ggcacggcg
24241 aggcccggtt tggcggtgca attttgtcgc cctaaaaagc ggcgggtgact acgggggtg
24301 gggatggggc cataggtgcc tgcgccatca agtccgggaa aaatggctt caggcggtcg
24361 ccgatttcca tataatccag ttcttttttg gcttcgtatt cctgggggga aagattttg
24421 attaatattc cagaatccgg gccaaactgg ggtgaagggt tggatgatgt ggtaaccgtc gggagccaa
24481 caggattcga ggaagggtgg aatggagaca aaaatgggtc cctgttcctt ttctaaatca
24541 ctgggggtcga ccagcaaaat gtggtgacat tctgttcctt ctggtaatag atcggcttct
24601 tcccagtcct gcaagctgag gaaactgggg gactgttgat aatttctcgc ccaccgttt
24661 acccccagat gcttcccag gtaggggctg atctccggtt aacgcccga aggtatccca gcgggtagca
24721 tcttcccag tgcgcccggc ataaattttt tcaccgttgg ccagtccac cccgatcgcc
24781 ttggagacga cctgaataat tttggttacc ctggctccgt aacgaatttt gccaccgaat
24841 tggttatttt cagctactag actttcggca atttgcacca cgccccctt gggatagtta
24901 ttttctagcc aatggcgatc ggaaaagacc atgcccagat tggatcatgg tgttaagtc
24961 atgccccctg cggaccagca atagcattcc atatcgataa atttcagtaa atccgggtct
25021 gcccgcacta ggcgggcaat gtccccaca ttttggggta aatatttcac taaaccaga
25081 tggatatggc gatgctgaaa aaataccgc atcaggtaac ggggttcctc caggagagc
25141 catgcccccg tgttgaggca gttaaatact tgccaacatt catcatagaa gcggcgga
25201 aattccatgg cctgaggaaa tttggcgatt aactcctgta aaaaagcttc gtactccga
25261 cctgggctt ggtctagccc ccccgcaaaa tggtaatgaa ttgactggg gtcggggaga
25321 tgaacttttg ggtctagccc agcggctaag gccctgggtt ataagttagt agtaccgga
25381 gtttccaatg cctgtccac tgaggccccc acatcaaagc gataaccttc ccgctcaaaa
25441 tgcggaaac caaaaatcat gatgaggtaa cgctctagta ccaatacttt caaaccctg
25501 taaccagcac tgcgcgggg gaccaaactc ggtttcttgg tctgggtagg tattgcgtc
25561 gataccaact ggggtggcggg agttttcttg tctgggtagg gcaaaaagtt aacaacggc
25621 taggaagggg aaacagtcac ccaactaatc agtttaaggt tttgcccga aaaaaacagg gagcactga
25681 acggagcaat ccaactaatc gaatccttga gaagagaaca ctgtgaaatc actatacaga
25741 tgcggagccc accccctact gattgttggg gatcgcctgc gaaaatgtcc gacgttctt
25801 ttactgcaaa ttattgtcaa tattgttggg gatcgcctgc tggagtaaat cgggataatc
25861 ccagggttgc accaaagact gggccaaggc tctgctagct tctgcccgt gcaacaccg
25921 ttccaaatgg agtggggcaa ggggattctg ctgtctagct ttaaccattc gttttgattg
25981 ggcaatgagg gtgcgagcgc aactgccaaa agcaacgcca ttaaccattc gttttgattg

26141 gtgaabagaa aagctctggg agcttaactt ggtgatagtg tgaatttg tgcctccggc
26101 caactgcaca aaccccgata gggaagattg cagcaccgta tcagcgtagt ggagacaaag
26161 atgggtagta ccccgcccaa tgtcccaact caggggcttg ccacgggttc gccaaattgt
26221 cggcattgct aatggcccca gccagccaga gatgggttgc agatactcca ccgcctcggc
26281 atggtagggg caactaatgg cgatcgctg gagttgagtc aataccggag ccagactacg
26341 ccagagtgtg tgaaccggtt ctctatgtcc cactcggtta tggatttcca gggcagcgat
26401 ttgtcccaac tccaaccaag ggaccagact agtcaccgtt gcttgatgag aataagtagt
26461 aataattccc tggggacaga tgggtaaaca gcggccacaa ccgtaacatt tttccgcca
26521 cactcctgtg gggacaactt catcagcatc actggtgatc gcccaagctg gacaaacctg
26581 agcacagggt cggggacaaat ccggaggaca cttttgggga tcaaaactggg ctttgcgaaa
26641 atggggatct tccccatcat tgaggctcac catcaaccaa ggggggttga tgaatagtc
26701 aaatgttttc acttcatagt gagaggaatt ggctaaagat aaagcaactt tgaatgcttc
26761 ctggggccac cgcaccaccg ccgagctcgc tgccaagtca atacagtcta cccctgcca
26821 cgtgtagacc aagactaaat ttcgaatggc agttaaattc tgatagctag ctccacaaat
26881 taatttcacc cagcgtcccc gctccaggga ttgctgggg ccattgggtat ggtggccagg
26941 gaaattgtct gttttcccg gataaagtga aatttcgcta cttgtcacag aaccaaagca
27001 ctccccgaca cgtcaacaat gcccagagca attcacggaa aggttttagg taaacataat
27061 cctacaacca agttcgagaa ccttctgctg tcgggcggat agtgggaagca aaaacaaaat
27121 gcctgtggat tcggtctgac ttagggttaa cccatcagga gtctaaacct agttaagagg
27181 agtagagaca ggaatctccg tccctgccga ttggcttga gggggagcgt ccacagtccc
27241 agggggcgga caaacagtct tcttggtccg acattgggta aagttgcttg cgggaaattt
27301 tttccacgcc tcaaaactga gtgagtctaa tttgatttgg ccattgctgt aacaaccgga
27361 accgccttag ctgtccttag ttttgccatt ttgcccattg cttagcactgc cattagccag ctcagcccg
27421 ctgtccttag ttttgccatt ttgcccattg cttagcactgc cattagccag ctcagcccg
27481 ccgataaaag ggagtaaatc gtttaccac cttactacc ggataaaaat aaacaaaagt
27541 tggtgcggtt ggcccttgtt ctttaccac tggggcaagt ggaaggggccc cggcgcatg
27601 agggggggga aaatctttcc tttgtggcca cttgggttgt gtcccgttta cctcggaac
27661 tgactcgctg ccggatgcaa ttcgatgggc aggcggattt gagttatgaa atgactgtgc
27721 tcaattcaga gtttatggac tatttgattg atctaattgc gggatacag gagataaga
27781 atattgactt tccgcaaaat ttttaccgta agcttttgcg gttagacgat gtttctacc
27841 ttttagctgt ccagagtgc ctatcattaa tcagaggaaa ctgagcttgc gtcagtgcag
27901 ggtatctatc aagccagttt ttcaccaatg ccgtcgctaa attaatcaaa atagcccagc
27961 agtcaaattt tttacctag tccatctagt caggagcgtt ccagtgggcca attcacccca
28021 atgtttatta gtccggtctt tggagcccta cagcggcaaa tcggggatta tctcggttt
28081 ggcccggtt ttgcaacaac agggcatggc gatcgctac ggcaagccca ttggtacggc
28141 catgaataag gcggcgccag cctggaaga agcacattt gaatttatta gccagagttt
28201 ggagttggca ccagccagg tgcgtaaacc cctggtattt ttggacgaaa agaccattac
28261 ccgacgctc caaggccagg atcaaaactaa ttatgccgaa gccctagagg catccatcca
28321 aggtctaacg gcggatttag tttgttggga aggtccaggc aatctctggg aaggtagttt
28381 attcgggctt tcttttctg aattagcggc caaaattaac gctgcagtgc tgttggtggg
28441 tcgctaccat tcccccttgg tgggtgattg cctcctcaaa gctcgacaaa cctggggga
28501 tagcctcaaa ggggtggtga tcaatgacat tccccggag gccctgccc agaccaaaga
28561 tttggtcaag ccttttttgg aaagccatgg tattgcggtg cttggtctgt tggcggaaga
28621 cgtttgtctc agaagcgtta gtgtgcggga actagcccat caactaaatg ccaaatgctt
28681 ctgtagtgaa gagcatctgg atttgatggt ggagagtctc accattgggg ctatgaacgt
28741 taactctgcc ctggaatatt tccgtcaagg ggaaaataaa gctgtggtca cggcgccga
28801 tcgtaccgat ttacaactag ctgccttaga aacctccacc agttgcttaa tttgactgg
28861 ccacgcccga cctcaacccc tgattatcag ccgagcccag gatttagaaa tttccatctt
28921 ctctgtggac caagacccc taaccacgtt ggaaattgtt gatcaggcct ttggtaatgt
28981 acgcctgcaa gaaccagtca aggtgcaatg tatccaacag ttgattgcca cccattttga
29041 tctccaagcc tttcaggaaa tcatggctaa ggggttagcct gacttatctc ccatatctt
29101 tagttcatcc ctgatctccc ccacaataaa gggctgttct ccaattttcc ccaattttt
29161 ggagaaccgg ggggcgttga aaacaattct tgaggcgtag tggtcggcaa agtttccga
29221 ttatcaattg gctaattggc agcgttgatc tctgtcagcc ggagcttctg gcaacgatgg
29281 tttttaaaaa atttgggcaa tggaaactgc ttcacatggt gcaaacaat aatctaaaaa
29341 agtttgggcc acaatggata attgcttcga tttttgataa ataataatcc agtgtttttg
29401 taagggaat ccttccacgt ctagcaccgc tagggggcca ttgattccct ccaatgcca
29461 agaatacagc gataaaattg agattcccc cccaccataa actgcctgtt taatggctt
29521 attactacta atctccatct ctacattcat ttttagcgg ttttcgctga aaaattctt
29581 cactgccatt ctggttccag agcctgattc cctcataatc aagggttcat tgactagtct
29641 ttccaaagaa attttctttt ccttgactaa tgggtgctgg cgagacgcaa ttaccacgag
29701 gggattttct aaaaagtggc ggatattaat atcaagattt gagggcggtt tacccaaaaa
29761 gtataaatcg tctaaattat tcgcaaacg ctccaaaatt tgttgacgat tgccaatttg
29821 tagagagatg gaaatgcttg gatattgttg acgaaattcc cccaaaagtc gttgacataa
29881 atattgctt gtggtaatag ttgctaggcg caggttacct ttttttaagc cctggagggt
29941 agcaatcact tcttgcatt gatccaggca agaggtaatg tttttgctag cgtctaaaac
30001 cgtttgtctt gcttcgggtt aatagatttt tcggccaatt tgttcataaa gcggcaccoc
30061 gatcgcttgg gtgagttgct tcatctgctg ggaaaccgtg ggtgggttca gaaacaattc
30121 ctccgcccgc ttggtgaaac tcccgcctct ggcatcgcc gcaaaaacct caaatgggtg
30181 gaggggtggc tttttcatag tggattaatt ttatagacta cttctataaa ttacataaaa
30241 aattggatat ttatctattt ttagctttcc ttaataatca gatcattcaa gtcccccttg

30301 attagatatt gtccctgg agcagatata agcagatata agcagatata agcagatata agcagatata
30361 cccagatggt cttccgttaa caggagatgt caggagatgt caggagatgt caggagatgt caggagatgt
30421 cttctctcat agaaaaaatc atcagatata atcagatata atcagatata atcagatata atcagatata
30481 cttctctcat cccgcaactg caaggagat caaggagat caaggagat caaggagat caaggagat
30541 cccagatggt cccgcaactg caggagatgt caggagatgt caggagatgt caggagatgt caggagatgt
30601 agcagatggt tgatgcccga aacagcgaat aacagcgaat aacagcgaat aacagcgaat aacagcgaat
30661 gctgagccat tgatcattgc tcaagaaaaa ggtttctttg ccaaatatgg catgacgggt
30721 gttgagatgt ccaaacagac caactggggc tccgctagag ataacgtcac catgagttcc
30781 caggagatgt gcatcgatgg cggccaatgg caaatgcccc atgtatgtat tggcccaatt gattacccag
30841 gggagatggt ggaatcgtta ttgcccgtag accaatgcat gaaggcaaac gggtaaacct ggatatcacc
30901 ggaatcgtta ttgcccgtag accaatgcat gaaggcaaac gggtaaacct ggatatcacc
30961 aaagcggcgg actatatcaa gggctttaac aaaaccaatg ggcgcaaat taaggcagcc
31021 cacaccttcc ctaacgttaa ccaagatatt tggattcgtt actgggttgc ggccggaggc
31081 gttgatcctg acaccgatat tgaccttagc actgtagat actggagatc cttggcccta tccatcgtg
31141 atgcccgaac gtaccatgga tggcttttag actgtagatc cttggcccta tccatcgtg
31201 acagaaaaaa ttggctacat ggcgggttta actgccccaa tttggcccta tccatcgtg
31261 gagtacctcg ccattcgagc ggattgggta gataaaaaat ccaaggcaac caaggcatta
31321 ctgaagggaat ttatggaagc ccaacagtggt attgatgacc ccaaaaaatc tctgaaggt
31381 gtacagattg tgcgcgttag aaattatttc aatgttccca ccaccatttt agagtctccc
31441 tttaaagggtc aatacaccat gggagatggt cagcctgcca ttgatgattt ccaaaaaggc
31501 cccctctact ggaaggacgg cattggcaat gtttcttacc cctataagag ccatgattta
31561 tggttcctca cagaaagtat tggttggggt ttccataaaa acgccaatcc cgatttagat
31621 acagctcaaa aaattattga caaagttaat cgcgaagatt tgtggcgaga agcagcaacg
31681 gaagctggat ttactgccga cattccttag agcacttccc ggggcgtaga aacgttcttt
31741 gatggcatta cctttgaccc tgctaataca tccggttata tgcgaagttt ggcgaatcaa
31801 aaagtctaac tagctattaa ttaagccatt tcattgttga tgattaatcc atacttcca
31861 aggagacaat aatgaccact accatttccc aaaggaaaaa tccggcggcg ggggccaatc
31921 cctacaaaaa gttttggcgt aagcgtcggg gtgacatttt gccccctata ttccggaact
31981 taggcttttt attgttctgg cagtttaatt ccagcgcagg tctgattaaa cttccccccc
32041 ccagcagttt gtggaccgat ccccgacccc gcacctgtt gatgtatccc tttacgacc
32101 agggcgggtt ggataagggg ttattttggc aaacctctgc tagtttaggg cgggttgctc
32161 aagggttatc cctcgcgcgc attgttggca tttagcaggg gattttggta ggtactcaac
32221 cctgctaga taaggctctt gatcccaatt ttcaatttct acggatggtc gctcccttgg
32281 cccgggttcc cattgctttg gtggcctctc agcaaaatca accagcggca attttcgtta
32341 ttttcattac ctcgggtggt cggattttaa ttaatacaac ggaaggggta aaacagattc
32401 cgcaggatta tattaatgtg cgtaaagtgt tarcgttgtc tccccaaaag ttcttcttta
32461 aaattcttat tccctcagca ctacctata tttttaccgg cttacgaatt gccattgggt
32521 tagcttgggt ggcaattatt gcagcagaaa ttgtcatgtc aggtattgtc ggcattgggt
32581 tttttatctg ggatgcctat caacagaatt acatcagcga aattatcttg gcagtgtttt
32641 acatcgggtg ggtgggttta ctcctagacc gaggcattgc ctatctccaa aagtttaattg
32701 ccccaggaca ataacaaact caccgacccc aggaggttaa caatttgctt tggagaaaaa
32761 aggagaccac ggactttttt tcaccgctaa ccataaacga tcaaaattag aggaattcat
32821 cgcaatgaaa caatatcgat tcacttggat cgcaggattt gctaccgta gctaccgta
32881 cacattccct ggttcgcgtg ggttcgcgtg ggttcgcgtg ggttcgcgtg ggttcgcgtg
32941 tactccgtg caggaaactga ctaccttggc ttggttaccg atgggccaag tgacatcggg
33001 ttccggagtt cgggatgtgc aaccaacgga ttgggacctat gaagccttaa aaagttagt
33061 agagcgttac ggttgcatgt tgggttacct cgtcgcact ttccgcggcg atcgttgcct
33121 cagtcgttgg gaatttgcgg ctggttctca tgcctgtatg aacgtgatgg agcgttaaat
33181 acaggaaaaa gtggccgtca ttgggcccga tattgacaag ctccaacggc tggcaaggga
33241 atttgaagca gaactggctg ctttgggggc cagggttgat aacctggaaa cccgtacagc
33301 ctacctggaa gacaatcaat tttccaccac caccaaaact aatggggaag tgattttttc
33361 cattagtggg gccaccgggg gagaaccgga ttccggataat gccagatag tttttaacga
33421 tccgggtgctg ttaaacctca ccactagctt taccggtaaa gatgccttaa ttacgggttt
33481 gcaggcctat aactttactg ctggaaaacc cattaccggc acgggaagtg tggcggaaac
33541 tctttttccc aacgatgcct caatttttgg tgaaggcatg accagtttta actatgaacc
33601 ccagtttgct ggttttaatc cccaaaatct ccaaccagt tgtggcaata acagcgtatg
33661 tctgtataaa ttgctctatg tcacaccggt cattgtcccc tttgccagtg aaggtcaggg
33721 gaaagcggaa gtcaccgatg cttttcccac ggtactacgg gtctcggggg gaacaacgga
33781 cactctttcc cgggcttttg ccattaaccc ttacaagcct aacgatgtgg tcgattggcg
33841 aacgggttta gctcggctg cggctctcat tccccaaaat gaaggttttc cggcactcc
33901 cgccttttac ggcctctgca acgctgctat tggggcggca acccaattaa cctctatcc
33961 cctcggagcg ggcttattca acggcagttt tgtggcggca taccaccagc tcaatatttt
34021 caccgaaaaa ctogactctg gtttcaacta tgcctatagc taccaccagc tcaatatttt
34081 aggtacggga ctaaccgggg cagcggcggg aacctaggc ggctaccgt tgacaacccc
34141 agttaacgtt aattcgggtg gggcgacctt aacttggcgt attaatcca gctttactt
34201 caccggctat ggtgcttact ggtgcttggg tcaggccaat ggcggttcgg cttttaccga
34261 tcttgcctag ttgatggctg ggctttatct cccggatgcc tttgtggaag gtaatacggc
34321 cggtttgatg tttggtcaac ccctcactag ggttggggcc ggtaatgggg caactttaac
34381 acccgccaat atcagcaacc gtgccacgct ctaccaaata gaagcgtttt ataactaaa
34441 gatcaacaac aatctcagca ttactccggg tgcgtttgta atttttaac cgggaaggcg
34501 ctctaacaat agtacaacag ggtcttttgc cctacggacg acgttcacat tttagagcct

34551 gttttaaaggc ccccccggccc ccccaaatctt ggggggaaagc cgggtgaaag ttccccagta
34552 tttttggagc ttttagcaggc cgattttagag ggcggaataa aacattccaa acacattctt
34553 aggcattattt ggcttagtat cttatccatt taatcaatct tctgacccac catgagtcct
34741 tttgttgctg ttgataatat cgataagggtt ttttccctca ccgatggagg tgaatacatc
34801 gccctcaagg ggattaaactt ggaaattaaa aagggggaat ttgtttccct gataggccac
34861 tccggctgtg gtaagtcaac ttgtctaaat atgattgcgg ggttagattt accaagtga
34921 ggcattgtta ccctggaagg tcagcggatc aagcagcccg gcccggaaca aatggtgatt
34981 ttccaaaatt actccctact gccttgggta acggtgaagc aaaatattgc cctcgctgtg
35041 gatgagggtga tgaagggggc atcggcggcg gaacgcaagg ccattgttga agaacacatt
35101 aatttagtg gcttaggcca tgcagtggat aagcggcccg gtgaattatc cgggggaatg
35161 aaacaacggg tggcgatcgc cagggcggtg gccattcgac caaaattatt gttactggat
35221 gaaccctttg gcgcgttggg tgctttgacc aggggcaatt tacaagagca ttaattgcgc
35281 atttgtgaac agtatcaagt cacagcgggt atggttacc acgacgtgga tgaagcgggt
35341 ttattatcag atcggattgt gatgtaaac aatggcccg gttccaacat tggcggatt
35401 ttggaagtgg atattcccg ccccgtaaa cgcattgga tggtagaaca ccctagttac
35461 tacagcctcc gcagcgagat tatttacttc ctcaaccaac aaaaacggat caaaaaatta
35521 cgggcgaaaa aaaccacggc gatcgccaga catggcctag aaaaagtcaa tctggaattg
35581 ggctatgtgc ccctgggtggc ctgtgcgcgc ctggtggtgg ccagttggcg gggcattgtg
35641 gccagcatg gcttagatga agtgagcttg gtgcgggaaa ccagttggcg gggcattgtg
35701 gacggcatcg ctgggggtta cctagatggg gctcaaatgc cagcggggat gccacttgg
35761 ctaaccgcag ggggttatcg ggaacaatcc attcccggtg tcagcgcttt gaccatgacc
35821 cgcaacggca acgccattac cctcagtaaa aaactctacg accaaggcat ttacaccgcc
35881 gaggattttc gccagcttct attggcctcg gacggcgatc gccacacctt gggcatggtc
35941 cacccttcct ccattgcataa cctcctggtt cgctattggc tggcggccca caaatcaac
36001 ccagaccggg atgtgcattt gaaaaccatt ccccgggccc agatggtagc cgaatgaag
36061 gcaggcacca ttgacggcta ttgtgtcagc gaacctgga atttacgggc ttccatggaa
36121 ggggctgggt ttagcattgc caccgatttg gaaatttggc aaaatcacc cggtaaaagt
36181 ttaggagtgc gggaagattg ggcgatcgcc catcccaata ctcatgtggc cttggtgaaa
36241 gctctgttgg aagcctgtgc ctactgcgct gaccccaacc acgaaatgga aattcgggaa
36301 ctgttggcca cccgtcaata cctcagcacc aacattgact atattcacct ggggtgacct
36361 gaagcccgca cctgcgcct aggcacctcc gtggaaatatt cccaccatct tttcttggc
36421 gatcaattta accgtccagc tegtaccgaa catctttgga tgatgacca aatggccgcg
36481 tggggagata ttccctttcc ccgcaactgg gtggaaattt tagagcgggt ttgtcgagtc
36541 ggggtattta gtaccgcgc ccgggaattg ggctacgacg tgaactatca ggggcaaccg
36601 atcgcccttt ttgacgggaa agtatttaac gccgatgacc ccattgccta cctgaatcaa
36661 actgtcattc atcgcaattt caccatttgt gaagtacatc ttgataacct caccaccgcc
36721 ccagtttttg cctaaattcc cttaacctaa aggggttttg aaccaaaccg ataaaactca
36781 aaccgaaact atttcccgct caccgatatg caaaccttaa aatcccagcg cgccatgctt
36841 actgcaactc catcggtatc aaaaaccact gcctttttta ccattcgaaa cgtttccaag
36901 gtgtacccca ccgccaaggg tccttacacg gtgttggaat atgtcaacct caccgttaac
36961 gaaggggaat ttatttgcgt cattggccac tccggttgtg gtaaatcaac ttgctcaat
37021 atgggtgtccg gttttgccag tcccacagac ggctctgtgc aggtgggagg aaaaatcatc
37081 actgagctcg gcccgatcg catggtggta ttccaaaact atgcctactt gecttgggta
37141 actgcctggg aaaatgtgta cattgccgta gatgctgtcc attcccaaaa aacagaagcg
37201 gaaaaacggg cgatcgccaa agaccattta gccatggtgg gcctaaccga ttccatggat
37261 aaaaaacggg ggcaaatttc tggcggcatg aagcaaaggg tctccattgc ccgggcccct
37321 gccattcgtc cagaagtgtt aatccttgat gaaccatttg gagccttggg tgcattcacc
37381 aaggaggaat tacaggaaga gttactacaa atctggaatg accaccgtg caccgtgttg
37441 atgatcacc acgacattga tgaagccctc ttctggccg atcgcttgt gatgatgacc
37501 aatggccccc acgccaacat tggcgaaatt atgaccatac ccttttctcg ccccggggac
37561 cgggacagga ttatggaaga cccacactat taccagctac gtaactacgc cctcgacttc
37621 ctctataacc gctttgcca tgacgacgtg gcttagaaag ttatagccaa gatactactc
37681 ccaaattgtt taggctaatt cctgtctttt tgggagaaat tgattccaac agtgcgctag
37741 gagtgttct tgagacgaat agttgctcgt actacatcca agaactttcc gggggaacat
37801 ggggaacata tagttcattt aagggtatgc taatcggcgt aatcggcgt tatcattgtg ggttaaactc
37861 atacggaaaa gctctggcga tcagggaatt attgctcttc ccaattcctt gacttcaatt tccatggcgg
37921 acttcgggtt gctggagccc tacacttccc gccctgtcaa caaaaccgac gtttggggt
37981 gcggggctgg cacactgact aaatctgggt tgccttgaa tgcctaacg aatgatgacc accgcaagg
38041 cactccactg ggttaaccaa tggggttgaa ccttaggtaa atgggacagt tccatgggta
38101 cgatcgccgg aatttgttcc tgccaaacga ccttaggtaa acaggaaata aactgccgtt aaaccgctac
38161 gacggccaaa gaaaaccgga ttaatcatta acaggaaata actgccccg aataccaaaa
38221 caattaagca caggagggtt tgggtaggga aaatcggaat tgccagcgt ggccatgaca ccgagaatca
38281 attcagcaat aaagccacc atgcctggaa cgggagttaa cagtccttgc aatttatcca
38341 tcaaaactgcc ggtgatgggt aaatctgggt cgggagttaa cagtccttgc aaggcagaaa
38401 cgtcccact gccggttttt ttatacacta cggcggtcac actcaagcgg gtacggcgcg
38461 tgatgcccag gctcaccatc gtagcgaag caatggaaga ataggccacc acttttttca
38521 cagcagccaa gagaatataa cccatgtggg cataaagggt gctaataagg gctagggttg
38581 tatccttttg agcgatcgca caggagcac caggtaaaag cccaatcca aaacgcagta
38641 ctaaataggg ggcaaatcc acccaggcct ctgccaacaa gacagaaacg ggagtggaa
38701 agccataggt gcctagttta agtaaaaccc ggaaggggaa aatgggaatt ttaatggcca
38761 cttccacgtg ggcacccggg agccagggtg ggaaggggaa aatgggaatt ttaatggcca

38931 aaccgagcag tttggggt aaga aaca tttgggtttt tttgggtttt gttatgggaa
38932 agctgggatt gtttttaaag tttgggtttt tttgggtttt gttatgggaa aaga aaga
38941 ctagtaccag aa tttgggag aggggttggt aaagcaaaaa tttatagctt gttatgggaa
39001 gccgtttgtc tttcccaaatg gcaatgagaa aataaagagg aataattttc agttcaaaaa
39061 agaggaaaaa taagagcaaa ttttgggtta ttttgggtta ttttgggtta ttttgggtta
39121 gcaacaataa ggcataagta aatctcggtc tttctatctc ggtatttggtt ctaaaaatgg
39181 caattaccac caaagcactg ttcagcaaca ataagggcag agatagccca tcaaccocctt
39241 ggtgataatt caaaccoccaa cttggcaacc agggataata tttccaaaaa tgcattctggg
39301 gatcactgat gttaaatttg ccagcttaata aaacgctcag cccagccatg gttaccataa
39361 tgcctaaaggc aatttttggg gagtaacaat catggtcagg gttcgggaa atagcaatga
39421 gaattagcttc aaaaattggg cccagatga gagcactgag catgggaatt aagacttatg
39481 taaagtttag taaattttaag ttggcttggt aaaaatttaa ttagatacta tcaagctaaa
39541 aaaatttgat aaaaattagg ttaacatcaa gcaaatcaga aaaagttagt tttaaatcaa
39601 gattaatttag ttttgatctt cctcaatta aggaagaatt agggacaacc aactggacca
39661 aaactgcctg atcgccatcc attgaccgct gagggaacc cagatcagca gggctacccc
39721 caccaagatg gtgagcagat aaaatttgta ctgccgggtg acatttatatt tggggcactt
39781 gccgtgaaat atagttacca aactgactag gttgactatg ccgtcgatga cgtaacgact
39841 aaaccaagtg ctgatttttg cgatcgccgc caccgctgcc actaccgtag cgcataaat
39901 tttatccaaa taaacatcgt aggcgaacaa atcctgcagg aaacgcaccg gcagtcgact
39961 tgagcgagag agattccgtc gtaaaaggcat aagactaccc aacaaaattc ctgtaattcc
40021 cgccaccatc aggagaggca tggcccatgt ggtaacgggg gaagttaaac cgaggggata
40081 ggtgctgtat aacaaaaaag accatgcaa gggggcaatg ggcaccagca ggtcgaat
40141 gatcaaatc accatgggca ccgctatggg ccagggtact tccggggccc ggcgggtttt
40201 gggctgggggt ttaccagaaa atactaaacg aaacacctg gttaaattga gggcagaaaa
40261 gaggttaaca aagatcaata aagccaatag gggccagctt accaaccagt ctccactaaa
40321 ccatttttgc caagtccaaa acatgcctag gggaaaaacc gccacaatc cgcagaaacc
40381 caccacaaag gaagtgtgtg tcacgggcat acgaattccat aatccccca tttcagtgat
40441 attttgaccg ctggtgtgtg aaataatcga accaatgctc ataaataaca aagctttggc
40501 gatcgcatgg gcgaagagca acagaaaggc aatgtctacc tgcctaaac ccaccgcaat
40561 aaataccaat cccaggtaaa cgtggtcga atgggaaagg gtacgcttaa tgtcaatctg
40621 ggcaatggca atcaacgacg tcatcaccac cgtcaatgtc cccagtacaa tcaaggtctt
40681 ggaggcgatc ggggagagggt taaacaccgg ctgtaactta atcaacacat aggcaccggc
40741 tgacaccacc accgaattac gcataatgcc cgccggatcc gggccctcca ggtctcgtc
40801 caaccaaaga ttgaggggaa attgagcgca tttgcccgtg gggccagcaa ttagagatag
40861 tcccaacaaa gttagcggtg tgcgggtcac tggcacctga ctagcccagt tgtccaactg
40921 ggaaaaagtt aaacctgac catagctaga gagggccact acccccatga ggagaataat
40981 atccccacc cttttggtta aaaaagcatc cggggcggcg gtaaccacca gggcttgggc
41041 ataccaaaaa cccaccaaaa gatagggtga aagggttagc atttcaaca ggtcagact
41101 taaaaatagg gaatcactca gggcaatgcc ccccagggcc gcttcgaaaa atcccagtag
41161 tccatagaac cgagctaagg accagtcctt ctccatgtag cccagaccaa aaatctggac
41221 taaaaaactg atgccagtc caaccgatag gggcccaaaa ctaaccgggg aaatctccac
41281 cgccaagggt aggtctaat ccgccacctg gagccaatgg aaaacaattt gctcactcgg
41341 tgtttgcca atggctgaga gggcaaccat gccatggatg gcagaaacca aagtcatgaa
41401 aacattgaag tagggcgcgg gtctaggggc cgtttgttta ataggggaa ttgttaaaag
41461 caggctaagg atcgacccaa tcagaccata aaaaaggata aaccaactac ttgttaaaag
41521 aaaaatcgga attgagcttg ggattgagag gaattttcgc ctagggttcg cagaaaatag
41581 gcaatttgtg atcagatttt acgctatcgc tgcctcaatt ctgactttgg cgatcgccgt
41641 tgtcggctct ggggaggttt tattaccccc gtttaactct ataggttaac cccggctttg
41701 tggattgcca aagttgattg ggagggccat tttgaccccc attgcggttt ttcagaccc
41761 caaggagcaa caatgtctag gcttcgggtg gagggtgttt ccccttagtt ttagtcttag
41821 tagttttggg ggccttgggc gttttcgtag ttttggctt acccgtggaa gtcgttgttt
41881 ttgctttcga ctccactgg ctccactgg aattccggct ctagggtatg ctccgattca actaccgctt
41941 ctgttgatcc attgcttggg tctctgtca aagaggtcgc cccagaagac agttggcgat
42001 cgccgttgtc agtatcaaga ccatcaagct tctctgccag caatggctca gctgtccct
42061 ggtccagatc taggtttttc ggagactcta gggcattctc ttgcttctcc ccttatggc
42121 catactcagg ctttttctca gaactatcgg ggttaaaagg agtcttttta acccgacggg
42181 gggttttgtc aaccggctcg gcaatctgtt ccacaaaacc aaaacaattg cgttggggaa
42241 tcaagcgagc caaaatctga taaaacttcg gccgctctc cgaatccttg cgaaaacggt
42301 aggggggttg atcgctccaa attaagggca aatgctgatt gttggggcga ttttcatagc
42361 ttttcagctc attgcatag acactaaaaa caggccggcg acattgggga ataatggcc
42421 acactccccg caaaacaaaa ataccagat cgctttctc tggactgggg atagcacttg atccaggcta
42481 agaccacttt aaagcttaac ccttctcctt tggactgggg aggcataat aaggtaaaat
42541 actttccttc caacgcggcc gccaccgcaa tggctcgcct ttttaccacc ccccgcaacc
42601 tggcatcccg aatctgtacg taatatcgtt ctccccctt ttttaccacc ccccgcaacc
42661 aaccgatcgc ctgataatag tttttggcag tggatcttag ggtagtgtta gctggggctt
42721 cggaatttag atcatctgcc gcggccacat tgggtttctaa aaggtcagtc tccgggggtc
42781 ttttgggggg cttcgggggg gtgggttgca tagtattaac aatcttggac gctcggtaaa
42841 cactgaatcc agtgtctgaa ttgatatgag tgacaattac ctccaaggca aggggaggag
42901 aaatgacaaa gccaaagcaa aatgcccttg tcaccagaaa aactaaaggg ttccggccac
42961 acggcaagaa cccctaggtt gaactaattt aactaacaat gagaacagga tttagcccca
43021 tttccacca gaaatacggg tagctcaaaa aagtttact aaccgaatca aactgggtga

43081 acgacggcga aciaaaaacta agccctagta ggggtatcca ccttagcttc taagacggcc
43141 accaaagya cccacggccac tggcattcttc cgggggtctg gctttgctaa ctttaaggto
43201 acgacccatc cattctgcac cgtctagggc ttcaatggca gccgtctctt cggcgtcagc
43261 ttctagctcg acaaaaaccga agccccgcac ggcaccagtt tcccggctcg tggggagctg
43321 aaccgccttt acggaaccgt attcagcaaa aaccgcggtt aaatcggctt ctgaaacgtc
43381 ataggacagg ttgcctacat aaattgacat ggattttctc caaaaactga gggatatgta
43441 gaggggtgatt tcggagaaat gccgtgcaat ggaaaaacgc gaaaaaccgt taatactaga
43501 aacaaatgct accaaccgat cattactcta tgggggcata gtaacacgtt ctcccctcgg
43561 ctggggatat taggtcttga attcctgata tggaaaccag aaagtctctc ccccagagta
43621 accagaaaag aatggtacca ttgcttagac ggctcgtgcc tatagcttat accaaccctt
43681 acctaaactc aatttttcgag ctttagctttc catgaccaac gccgccctag acgataaaac
43741 catcgttcgt gactatttta attccaccgt ctttgaccgt tggcgccgga tctatgggtg
43801 cggccaagtc aatttctgtgc aaaaagacag ccgggtgggg tttacctggc ttgttagtct
43861 ggtggtggcc tgggttagtgg cggagggaaa tttacctggc ttgttagtct gtgatgcggg
43921 atgtggggta ggtagtttga gcattccctt ggcccaagcg ggggcattgg tctatggcag
43981 tgatatttcc gaaaaaatgg tgggggaagc ccaacaaaag gccaggaag ttttggccta
44041 tggcaatcag cccacgttta tgaccacagga tttagcccag ttggggggta aatatgacac
44101 agttatttgt ctggatgtgt tgattcacta tccaacggag gaggcgtcag cggatgtag
44161 ccacttggct tccctggctg atcgccgttt aattttgagc ttgccccca aaaccctggg
44221 cttgacggtg ttgaaaaaaa ttgggggact gtttcccggt cccagtaaga ccaccagggc
44281 ctatcaacat aaagaagcag acattcgcaa aattttggga gataacggct tttccattgc
44341 ccgtaccggc atgaccagta cccgtttcta ctattcccgt attttagagg cgggtgcgtc
44401 ttaagttccc atggccatta cccccacca attgttggat tggaaagcgt aacaacggcc
44461 tattgtggcc cttactgcct gggatacggc gatcgccctg gtgttggatg cggcgggagt
44521 ggaaattatt ctggtggggg attcctctcg aatggtggct ttgggctacg aaactacct
44581 accggtgagc ttggacacca tgattcacca cacagcggca gttaaaaggg gagtacaaag
44641 agccttgggt gtctgtgacc tgcccttttt gacctatcag gaaagtccag cccaggccat
44701 ggggtcagcg ggaagggttt tgcaaggaaac cgggtgcccg gcagtgaat tagaaggggg
44761 tcacccccgc atggtggaaa ccgtagctcg actaacggag gtgggcattc cgggtgatgg
44821 tcatgtgggc ttaacgcccc aatcagtcga ttcagtgggt tatcggaac agggccagga
44881 cccggccaca gcggagaaaa ttcttcacca ggcatcgcc ttggcagagg cgggagtgtt
44941 tgccattggt ttagaacata ttctagcga actagcggct agtatcactg agcagtggcc
45001 catteccacc attggcattg gggcagggcc ccagtgtgac ggccagggtt tgggtgacggc
45061 ggatttactc ggtttgacag tcaacaaccc gccctttgct cgggcctatc tgaatttacg
45121 acataccatt acggaaaacag tgcataaatt cagtggagaa gtgcgacaaa gacaatttcc
45181 ccggcggggg tagggaacaa actaaaactt tgacaaaaac tgcctgtggt ttactatccg
45241 accaaaccg attgactgcc gaaaaatcta tgacaaaaac tgcctgtggt ttactatccg
45301 gaggggttaga ttccgccacc gtagcggcga tcgccaaaag ggaagggtag cgagtatttg
45361 ccccttccct taactacggg caacgccatg accgggaatt gcgagcggcg gcagacatcg
45421 tccaagctct ggggatccca gaacatttca gcataaacct agacctggcc cagtggggag
45481 gctcttccct gaccgatcgc caacaaacct tgccccagac aggggtagaa ccagatatta
45541 ttccctccac ctatgtgccg gggcgtaaca ccgtatttat tgccctcggt ttatccctag
45601 ctgaagcaaa gggagccgaa gcggtatttt tgggcatcaa tgccatcgac tattccggct
45661 atcctgattg cggccccgaa tatttagcaa cctatcaaca attagcagcc ctgtcttcca
45721 aagtcggggg agaaggaaga cccattcaat tgctggctcc cctgattgaa ttgagcaaa
45781 ttgacattgt ccataaagct ttggaattgg gagtcccat tgcccaaacc tggcttctgt
45841 acgcccgggg ggaagaaccc tgtggtcgct gtgactcctg ccgtttgctg gatcaggctt
45901 taattgagga agggcatcca gaactggcca gtgccaaggg cgtcttttgg agggaaaaag
45961 ttgactgaac tcccccttct tctggacgg agaaaaggta attcccgttc gcattaatca
46021 aggtcagcca ggaagctttg caaccagtag accaggagct aacctccgtt ggaacatctc
46081 gggatatatt accttcattg acggcagatt tgattggggg aaaacaacca tgggttaagtt
46141 agggcagtta ttggcatcgg ttccagaggt ggtggccgcc gcccttgggt tggccaggga
46201 atcggatcgt tgccctgccc tagggaaaat agtgactggt ttatctacca attcccatgc
46261 ctgtccccct ggcactttat tcatggcat cgggggcaac aggggtgacg gaggggagtt
46321 ttggtccggg gccctagaag ctggggcgat cgccgctgtg gtcagtgaga aggcgttgca
46381 aaaatttccg ccccaaaatg gagaatgcgt cattgcggtg ccggttttag tgccgggtgt
46441 tgccggcctt gcggcgccct tttaccaaca tccgtcccaa acgttgcaac tgggtgggag
46501 aacgggcacc aatggcaaaa cgaccaccag ccatttgatt gaattttcc tcaataca
46561 gcaacgggtc agtgctttgc tgggaacctt ctacaccgt tggcctggtt accaaaagac
46621 cgccaccac accacccctt ttgcagcggg tttacagaaa caattggccg aagctctcca
46681 ggcgggcaat caatacgccg tgatggaagt tagttcccat gccttggccc agggcagggt
46741 tttgcaatgt ggctttgctt gcgctgtgtt caccaacctc acccaggatc atttggaact
46801 ccacggcacc atggaaaatt attttgcctg caaggctttg ttgtttaagg agtcatact
46861 ccaaggtcgg gcggtgatca accaagatga tccctacggc caaaggttaa tgcatacct
46921 accgttggat caggtttaca cctacagcgt caacgatagc actgcggaat tttacacca
46981 ggatttggac tatcaacca cgggggttaa gggcacgttt gttactcccc agggggaatt
47041 tcccttccctg tcccccttag tagggcaatt taacttggcc aatgtgctag cggcgatcgc
47101 cagtggcctg caccttgggc tagatccagc cgccatgggt aaggatttac tgcattttcc
47161 tggggtagcg gggcgcatgg agcaggtaga aatccgcccg gatcaagaca tttctgtgat
47221 ggtggactat gcccacaccc cggacagttt ggaaaatgcc ctcaaggccg cccgccctt
47281 tatccccggc cgttgatttt gtatatttgg ttgtgggtgg gatcgggac gtaccaaacg

47441 ggcctctatcg ggcgaataa cgggtcagct ggaggaccta ggggtg cctccgacaa
47451 ccccgctaac gaagaccccg aacaaatctt ggttgagcta gttgttggga tcagctctaga
47461 catcgaaacc tggatcattg gcgatcggtc cctcgctatc cataagtcga tcggggagagc
47521 aaaaccgggg gacgggggtg taattgcggg ca agggccac gaagacaccc agattcttgg
47581 caccgaaaaa atccacttcg atgacgggga acaggccagg gaagcgttga ttttacgcta
47641 cagctagcat tgcacccctt aagaacccat tggccagggt tcagtttgct ccgcaaaaaag
47701 tgaccacaat ggctggagac ttttacatag tcttcagcca aaattaggag catcggtcgg
47761 ttttttaaac acgcctcaac tacttgctac tgattcgaag acggacaat ggccttcgcg
47821 cctcacctct aatcccatca ggggagaaac gggattacga cctcgtaaat gcgaaaaatg
47881 tcggcagttg gcacagcaat caaaatctac cgggcgctta ctgcttgat tttgtttgag
47941 caattccctt tggctgaccc ccttaataac cagttctctt ccttgccaac gggcttgca
48001 aatgccggtt tgcgcaaat tgcgcaaac ggaattttct agaatttgcc cgtctaaatg
48061 gatgaccact tccccaggt gatgaatctg cttattcggt tctagctcgt ggatttctcc
48121 ttcataaatc tggggcggcg ggggagtggt ttgtacaaat cgatcgccaa tgggcagggc
48181 caccgcattg ccggcgggcg ggggaatggg ctggtagcga ctttgaatt cttctaaat
48241 agttaagtct tcaatatccg agggttgccc atggacaaac accaaatgtt ggggacggag
48301 attatggatc aactgggtcg tgttgcggcc atcactatgg tctgccaaca gataatcttc
48361 cagctcatat ttgggaaact cttctaggtc ttgcccaggca aagttcacca aacaactggg
48421 taaggtaagc aactggggca taaatactgt ccacaatccc ggtaaggcgg cgggactagg
48481 ccaaaaagca ggccaagtgt tggtgattac tatggatggg gccgataggg atagttcgcc
48541 ctggtcatcg gtgagggggc gcagatgggg ataaacttta tgcgtcccaa taggggttg
48601 gtgttggggc aaattgcgga cattatcggt gagatggta attattccct ggtaagcgtc
48661 acaacctctg gccacggatt ccccgcccca aaggtttaact tgacgcccgg tgaactgatg
48721 gtgggtcctt agtaacttga gaatttctct ggctaaacc aagggaggga ctggcaggag
48781 aatattttct ccttggcta gcacgtttc gatcgccctg ataatgtgt ataaattgtt tttcctgtt
48841 acgacgggtg ggtaaacggc ggttgccata atgtccttct aggatcagca catcgggtt
48901 cagaccccg caggggagtc agggcagacc gtctactaac tggagatggg aaaggcaata
48961 atccccggta taaatcacc ggtaaaggcg atcgccgtta tggatttcga gcaaaattag
49021 ggcagccccc ggtaaatgcc ctgcccgtta taattccacc gtgaggccag gtaaaacttc
49081 ctggggcgat cgccagggtt aaaccgcaca aaatggaggc acaaactcat cgggccaaat
49141 caggggcagt aaccgttggg taacttcaat ggccagaatg ggaatgtggg gaaattgttg
49201 gtgaaattgc cacaacccca aaccgtgat cctgtgggca tggctacaaa aaaccagatc
49261 cactgtcccc ggatccgctg ccaacaatgg tgttaagtct tctaaaccac agtcgagcag
49321 aatccctatg ggtcccaaat gcagttccag acaaatcccc ccatcccggg gaccactcc
49381 atagggaaga aaggacatct tggcaaaagc cttgcccctg gtcggcacgg aaaaagtcac
49441 ggaagcttgg cgatcagccc tgggggcaaa gcaaaatcaa tcacaataac ggcgggtaaa
49501 actaatgggc agaaccatta ccgtcgtact tgtcagtgct gtaatagcca tttttggtg
49561 cgaaaaatag acatgccagg gtaaacaccg ctgttagacc aatcaaaatc attcagcat
49621 ccatagaatt atgtcgcaaa caaagcaaac tgcgccccca tcgtaactcg tttccccca
49681 ggggagcaga attttcctgc catttgcatc ccagaccaga gcgatgggat tgacaacgct
49741 gctagcaaca aaattagtag tcaaaaagaa ctatctgatt tgaccatac caattttcaa
49801 ggcattggtat aggtggaact ttcccacacc aaagatattg actgtatcga tattgggtg
49861 ttgcttttac gtttttgcga tgaaattttt taaaatcact accctgataa tttagcgtat
49921 tgttctcact agttgccagg gcccagggtt taatggggac gaagacagaa aacagggtgac
49981 catccttggg gtaatgattg ggaacaaca ggaaaaaatt gaacaagccc tagcgcctt
50041 taccgaagcc accggcattg aagtggttta cgaaggcgtt gatacctttg ccaccacctt
50101 acccattcgg gtcgactccg gtcgagctcc cgatttagcc atgtttcccc agccgggatt
50161 gatggcggat ttgcccaggg aaggaaaatt agttcccctg ggggaaattc tcaccccggg
50221 ggaaatgaca gaggcctatg accaggcttg gttggattta gctgcggtg atggcaccgt
50281 ttacggcggt tggatcgag cctcgttcaa aagtctagtt tggtttaatc cccaagagt
50341 tgctgctaatt ggttatgaag ttccctggc acagaccaga gaaagtggca atgctacggg
50401 gctgattgat aaaggcaaaa ctccctgggt tctgggcac actgctagtc cggcaacct
50461 ctgggtgggc accgattggg tcgaagatat tatgttacgc actgctagtc cgggtggaaa
50521 tgaccagtgg gtaccccatg atattccctt caacgatcgc cgggtggaaa atgcccgtg
50581 tatttttggc gaaattaccc ctatttttag ctatgttagg ggcgggaagg tggcgtctt
50641 gagcacgctt tttggagact ttgcccgtt tttgcccggc gatgtggacg atgaccaggt
50701 acaccgcca ggaatttca ttgcccgtt ccattgaaga agagtatggc ttacccatcc tgggtggcagg
50761 tgatattttt cctttgcccc acgatacgc tagccgccac tttaggagct cagtcgtatg catatttgg
50821 ggatattttt gccatgttta cegatcgctt gaccgtaaa gatccccc caggcggaat ttttgaaca
50881 gagctcccg ccccatgaag tagccgccac cagatcgctt tatgatgccc gggagcgttg gcacggggac
50941 cattgacctg aatctctatc attcggtttg actacatcgg cggcgccgac ggtactcaag ttttaaacac
51001 ggcggagggt agttggcccc gttagatgcc ttagttactg ctgcaactgt gttatttgg
51061 gttttggtct ggcatgggtg actacatcgg atcgcggtgt taatgttctg ttggcgatgc ccatgtgtg
51121 cattgaaaga aatttgtttt tttaccttgc taactacgcc attaatgctc tgcccaaac
51181 ggaaaagaaa atcggtttgt cctgggtgta tgtaaccccc gctttactct tctgtcggc
51241 tggcggggta atcggtttgt cctgggtgta tagagactgt ctatttaagc ttttttgatg ggcgctccag
51301 ttggaataaa aggatattgc cctgggtgta tagagactgt ctatttaagc ttttttgatg ggcgctccag
51361 ctatctaata ttgcccaccc ggattaaaaa attacgtttt ggccttcaca gaccacacca tgttgggtg
51421 gaattttgtc aacttattat ggtagtact ggtcacaggc atcagcgcta gtttgggggt
51481 atttcgcaac aacttattat ggtagtact ggtcacaggc atcagcgcta gtttgggggt
51541 aattattgct gtcttgggtg ataaagtccg ctacgaggcg atcgccaagt cgatcatctt

51601 ttggcccatg gccatttccc ttgtgggggg cagcgtcatt tggaaatttg totacgctta
51661 caggccagcg ggggcccgaac aaattcggctt gctcaatgoc attgtatcta gcttgggctt
51721 tggcccccagtg ggatgggttag tggagcgatc gggaacaat ttggccccc a cggccatcat
51781 gattttggctc tacaccggct tttgtatggg tattctttcc gccgcagtga aaggcattcc
51841 cgctgatgtc attgaggcgg ctaggattga cggagctaac agttggcaaa ttttttggcg
51901 cattaccatt cccatgatcc gctctaccct gttagtagtc agtactacca tggtagtttt
51961 agtgctgaag gtattcgaca ttgtttttct catgaccggc ggtaaccagg gcacggaagt
52021 aatcgctagc ttgatgatta aggaaatgtt taattatcgc aactttggcc ggggaagtac
52081 cattgcccgtc attttgttgc tgttaattgt gcccgtagtg atcaccaata ttctctgttt
52141 taaagctcag gagaaattac gttaatgacc aaagccgtta ataaatctaa taggactaat
52201 aacaccaata gaaaaacaga atttttggcaa aaacttccca ttccatagc aattctcacc
52261 attgccttca tttggacatt gcctagttta ggtctattta ttagctccct acggccccgg
52321 ggggacatgc tcagcactgg ttggtggaca gtatttttgg accccctaga aattaccag
52381 ttttactctg gcaactatgg ggaactttta cgcctctcgg gcatggggga agctttttta
52441 aacagtttga ccattgctgt gcctgccacg gtgattccca ttgccattgc cacctttgcc
52501 gcttacgctt ttgcttggat gacctttccg ggacgacaat tattatttat tttggtggtc
52561 tgcctactgg tgggtgccttt acaaaccact cttattcctg ttttgagggt ttacgccccaa
52621 ttgggcctag cgggcacttt ccttgggggt tggtagccc acactgccta tggctgcctc
52681 ctgggtattt acctgttacg caactacatt ggcgtctctc ccaaagacct aattgaagcg
52741 gggcggtgg atggtgcttc ccatttaaaa atttttacca agttaattgt gccactctcc
52801 atgcccggga tcgctcctt tgcgtatttt caattctctt gggtaggaa tgatttattg
52861 gtcgcccctg tttacctggg gggcaccgcc gatgttgccc ctgttaccat ccaactgagt
52921 aatttagtcg gctcccgggg acaggattgg tacttattaa ccgctggagc tttcatcagc
52981 atgattgtgc ccctaattgt tttcttttgg ttgcagcggg actttgtcgg aggcctcttg
53041 gcaggatcag ttaaatecta actggcaata acccgattaa ccaaagccat acagtactg
53101 cggctgagtt tttccttacc cagggccaaa acatccaagg tgccataggc aagggtgagg
53161 ggaattttac agaaattgag ggcgggaccg tggggcaaa atttggtgta ttgatctgcc
53221 aacgccaaat tgtaacgggc atacttgtgc atatccgcca gtcccaacc ctggggaaaa
53281 aagctcacc cccggcgctt atcttccctt tagttgcgga caatgttcac cgcctggagt
53341 ccccgacca aaccaatggc atgggagcga ttcgtttggg tgccatcgtg ccaagccac
53401 aaatccgaaa gcagtagacc caccgcccc gctacactaa aggtgtattg gtccactcg
53461 ctttccgttc tgatttgcca gttttggagc gcccaaaaag ccattccgat cgacatggcc
53521 gccgtggcat cccaaactct agggacaaatg ctttccgggg ctagcagggc ccattctccc
53581 acccttaaag ttacctccgg caaaagggtt cggtaggggt ctaatccccg aataaagtcc
53641 tcaactgtgg agttttccgt cgcactctgg agattaagac taatctgatt taggattctc
53701 gcttttggct cagcatccag gtcgggggtg tcttccactt catcgatcgc ccgatacaa
53761 aggtaggcag aggccaccgc atcgagaagg tgatcaggca aaatgcta at gggaatgtag
53821 aatgtccgac tggtttcttg caaaacctta agggcattac gacgtaggct catgcgatca
53881 actcctgaca ccaaaaattt aagcggactc tcaacttacc tattcagggt tgcaatgcta
53941 ggcaataggt tccagcgggg ccaaggcgag ttttttggta ctccataacc tggcagatcc
54001 taggatcttt aaatctccca atgccccgac cgggtaaat tgagcaaaa aatcacccca
54061 ttctattacg gcttttgggg tgtgctacag acaaatgggg gccaggggga gtaaccatt
54121 gcttttccct aatgatcccc cattgtgggc actccttaga tccgccaacc tcaatcctat
54181 ggctaaactc agtcttgggt cccgtctttt cctttcccat atgctggtga tgctagtcgg
54241 gttgggcagt ttctgttccc tggccaaaat atcttccccc cgcattgttg ttctgcgcct
54301 agaggagtgt gaaagtcagg gatattataac tgttcgttcc gccaaaacct atctgatccg
54361 ggggttttgaa accgcctgga atcgcagttc cctctgggca attatctttg gggccagcgc
54421 cgctggaggg ttaagcttcc tagccgaga caggggcga ttacaatcc cggatgcccc ccagtgcacat
54481 gttagccacg aaaaaatttg gccaaagtgt taatcgcatg gcggatagct tggaaaatgt
54541 tccgtaattg gaggagtgtg gccaagtgtt cctgaccac gaattacgtt ccccttaaac
54601 ggaacaacaa cggcggggaa ggttgagtga ggagggcacc attgcccggg atccggaact
54661 ggtggtgcgg ggctatttgg aacaattggc gttggaacgg ctaacggttg attacaaga
54721 ataccaacga ctggtggggg aaaccgcgag ttattctatc taaccaacgg caacccttag acctttatcc
54781 actgtccaag gtggaagcgg gttatttacc ggatcagtta ttggaagatg gcccggaatt
54841 cctgttggca aaattacaac ctctcccaac ggtattggcg gatccggacc gcgctgagca
54901 aatcctcgct gtccaaacct ccaatgcggt gcgttatacc cccagcgggt ccattaccat
54961 aatttttggt aatttaattg gcaatgcggt tatggaaaag gaaaatttac tctgggtgac
55021 cgacgcctat ctttgtacga ataggaaga gggggattta cctacgtgt ttagcgatt
55081 tgttactgat acgggcattg gcatcgcaga gggggattta tccggcggc acgggtttgg ggctggcgat
55141 ttggcgggct gataaatccc gtteccgtta tccggcggc cagtttgact gtcacgagta cctggggcca
55201 cgccaaacgg ttggtggaat tgcagggggg ggtctgaagg ctgatcgccc ctgggaaaaa
55261 aggtagttag ttttaggttt ccctaccatt ggttaccctt cccagtcac atccagacaa
55321 gtttgtaaca ctttcagcca gaataatccc tccaacatta tgcacaagaa atcaaaggcc
55381 agataaggta gagttgtggt ggatttaacc gcaataggga atgcttcac ggagcagatg
55441 caattgcagg attattttcaa ggaatttgaa acggaggaaa atattaatcc tccccgcaa
55501 gaggccaaac gggatggcat ccagggggaa caggaggaaa atattaatcc tccccgcaa
55561 aatccgaaaa aaaggctatc tttaccgaat ttatctagtc cgtccttggc agcagaggcg
55621 gaaaacctag aaagtgcagg gcaacctggg tcagactact tatctaattc attcggccaa
55681 gctaataaag ccaatgttgc cgttgcgcgg gtaaattcag attacattgc cccagagaaa
55741 ttggaagatc aaccggggg ttttttcggc ggtaaacgct ggttctggtt gggagggatt
55801 ttagtgctgt tgggtggggg caccgcccgt actctgcca aggctttgga aatggtgaac

55861 ggttgogac aggaagt actcaggt taaggagagg aacaa a gattccgac
55911 gtgctcaggg tgggtctat gctcccgat caggagagg gtagctcga ggtgattgac
55981 aaccaagaag tatctatccct ggaaagtagt agggtaggt tttgctcagc aggggatttg
56041 ttggcggaat ttgagggagg gccgggctc cgagtattag aaggattgga agtgcattat
56101 ccagtgttag cgcctacat ttgtctgat cggggcggg gctatcaatt gagcaacgaa
56161 aatgaccaag cggaaagctac ttggcaagac attttagacc aatatcccgat tccctctgtg
56221 gtagtcaatg ccttgaaaaa ttgggcagc ttggatgaaa cctattggca acaggcgatc
56281 gccgaccatc cgggcatcc cgcaccttg gctattctcc accagcagtt ggaaagtga
56341 cctaattgctc tagaaatcca acggcaaat ttgcaaaatc atcccaccga tggcgcgact
56401 gctgctgtga ttaattccct cacagccaat cggcaaggag agttaacccc tgaggattgg
56461 caggccatgg gggacaactt ttggcacgc cgcattctata accaggcgat cgcctctat
56521 gaaaaggctc ccagcaatgc cgtaatctt tatcgtttag ccaggggcca acagatttagc
56581 aaactagata atgaagcaaa ggaaattat cggcaattaa ttgccacctt ccccgacagc
56641 gaagaaaccg ctttagccct gcgacgttta gcggaattgg tccccccag ggaaggggtg
56701 caatattttac agcagttaga gcaacaattt cctgaccaag gggcctctgc cttggcgcc
56761 cgcatagatc tgctggcgaa atttgatgct aaccaagccc aacaggcccc gcaagctctc
56821 ctgcaaaagt accccaattc cgtgctgcg gctgattacc gttggcgta gggccaggag
56881 ttgtctaaag ccggcaatta cactgaagct tggcgctggg ccaaggaaat tgccaatcaa
56941 aatccccaga gtgacgttac ccccaaagcg attttttgga tcgggaaatg gggcccaaca
57001 ctaggggcgt cggctgattc caaggccgct tttgaaacag tcttggttaa atatccccag
57061 tccactacg cttggcgatc ggcggtatta ctgggttggc aggtggggga ctttaactcg
57121 gtgctttctc tcaaccccc ggtagcgttg cggatcagc gcccttacc cccggccggt
57181 tccccctctc ttgggagtt gtatcgtctt gccaggatc aagaggcgat cgaacttttc
57241 aatgcggaag ttggggcccg ggcagaaggg gaagccacac cggagctaac ggtaaatgaa
57301 ggtttttacg aagctttact caagctgacc caacaggagt atttacaggg catcaacca
57361 gtcttgaact tgcgcaatcc tgaagaccg gaacagagaa aacaatggga agaactcgg
57421 agtaccaggg attattggca aacctcttt cttttccct accaacaatt atttttgaa
57481 tggctcgaaa aacgtcaggt caatccattt ttggtcactg ccttaattcg tcaggaaatc
57541 cgctttgaga agaatatcca gtctcccggt ggagcaacgg ggttgatgca gataatgcc
57601 gccacagcag aatggattgc gcccacaatt ggtctgaagg aatattccct caccgatccc
57661 accgataacg tcaatatggg cacttggtat ttgaccata cccataaaac ctataacaac
57721 aattctgccc tggcggtggc tagctacaat gccgggcccg gcaatgtggc caaatggtta
57781 caggaattta acaacgctga cctgatcta ttgtggaac gcatccctt tcgggaaacg
57841 aaaggttatg tggagtctgt ctttggtaa ttgtggaat atctacgcat ttatgacccc
57901 gatgtggaaa aactgatggg gcaggtaggg aagaattaat ctcgttttta ttaactcag
57961 agccttgga cggggaatct cgggcaagtt ttatgccgcc gacgttagct tggggatcgc
58021 agcaaaaatc ttccttgga caccaaaaat agccaatctc cettattcgt ccattagaat
58081 tgcaattagt caggcactcg ggccaggttt tatccatccc tcaaggtgtg attactgat
58141 ttccgcccgg aaaaatgggt cccgttcccc gcatctacta tgatcaaacg tttttctctc
58201 accattctgt tctttgctgg tcttggttt gccctcaatc tctatctcca acaccatggt
58261 ttggcccagc gtggtaatta cgacagcttg atcattaact tcagaaacga tatccccacc
58321 cagaccctga cggcggtat ccaagccatc gatggcaagt tagaaaaaac ggtggatttt
58381 aatagtattt tctcgatcaa agattatgtt tacaccgtta aaggcgatgg ggaagattta
58441 aaacggctgc ggcgatcgcc ttgtatgaag gagggtgact acgttgaacc caactatgtt
58501 taccaagccc tagaagtgcc caacgatctt gaatacagta agcaatggaa tctccgggcg
58561 atcgccatgg atcgccctg ggatggtagt aagggggaag gggtaacggt tgcggtgatt
58621 gataccggag taaccagggt tccagattta cgacaaaccc aatttgtcac tggctataac
58681 tttgtggacg ataatcgtga caccaccgac tacaacggcc atggcaccca tgtggcgga
58741 accattgccc agggcactaa caacgaatat ggggtagcag gtattgcccc caaggctaaa
58801 attatgcccc taaaagtgtt gggggacaac agcgtgatca atatgagctt ggggggccc
58861 gccattatct atgcggcaga taatggggcc gactacgctt acagcaagg ggtggtaatt
58921 ggtgaaagta aaacctggc cgatgctatt gactacgctt atcccggctg gtaccgaa
58981 attgcggcgg cgggtaatga aggacaaat gcccgggcct cggactatc caattacggt
59041 gtaatcagcg tggctgccac cctgggggtt agcaccgacg gcaaagacgg caaattctc
59101 gcaggggtgg acatagctgc taccagggaa ccagattga tgggttttca gggcactagc
59161 caagaaacca ttgaccaga cggcacagcc gctttgatcc aatcggtgca actgcaacag
59221 atggcggtc cccatgtggc aagggcgga gaaaatttaa ccatagccga agtgtcgaa
59281 gcaaaagtgt gtttatcgac tctcaaagcc tctgcccgt ctgtgccaa cgatagctg
59341 ccagaaatgg tattaaaaat tgtaaacgcc ggggaagccg tcaaacagc ccaacaagg
59401 aattactacg gtgctggcca catgctgtg ttggggata acggttatct caatccatc
59461 gagatttctc tccgggattt cgtgctgtt ctacccaaat tagccatgggt gttggggta
59521 tttgtgttcg acgggggagc cgtaggttct ctacccaaat aatttacctg gccgttcaac
59581 taccctgttg gtttactgtt gcggatctat ctaccgttgc aggtctata catttttgac
59641 tggggattaa ttttcggtag ctgggctta ttctttctac cggagttggg taacagtctc
59701 ttgccccaat ggcccttccg cgcattgggt gccagcccc tctatccat tctatcta
59761 cctggcacag gtttgttaa tctttttttt gccagcccc tgggagtttg ttttggggtc
59821 ctactgctcc tgggcaaccc cagtgggaaa ggcactcccc tttggctcat tggcaccggc
59881 actgttttct ttttaattct cgcttttctg ggcactcccc tttgggtct tgggtctttg
59941 tccacggcga tgcctttttt ggtggttaac gccctaact cctgattctc aaggattggg
60001 gccgctaagg gagaacatta gtctgataaa gactaaatcc cctgattctc aaggattggg
60061 ggcaccgggg gaaatgataa gctagcaaa gcgtaatttt acaaaaaaaa tttatctagg

60131 agcaataatg acagaagcaa atgattctgg caacctcttg caggtagcaa ggggcaagc
60131 ggttaaacgt ccccccgtgt ggatgatgag ccaagccggc cgttatatga aagtttatcg
60241 agatctgcgg gataaatatc cgagttctcg ggagcggctg gaaaacccag acttcggccat
60301 cgaaatttcc ctccagccct ggcaagcggt ccaaccggat ggggtgatca tgttttcgga
60361 catttttaact cctctgcccc gtattggcat tcccttcgac atcatcgaaa gtaaaagggc
60421 catcatcgac cctcccatcc gtacccaagc ccagggtgat caactccatg ccttagatcc
60481 ggaatcaagt ctgcccctca tcaaaactat ttgggaaacg ctacggaaaag aagtaggcaa
60541 ccaatccact gtgttgggtt ttgtgggtgc tccctggacc ctagcggcct atgccattga
60601 agggaaaaag tccaaagatt ataaagtaat taagcaaatg gccttttctg aaccggccat
60661 tctccacagt ttctcgata aaattgccga ggcgatcgcc gtttatgtcc gttaccaa
60721 cgactgtggt gcccaagtgg tgcaattatt cgattcttgg gccggccaat taagccccca
60781 agattacgac acctttgccc tgccctacca gcaaaaagtg gtcaaaactg gtcaaaagaa
60841 ccattcccat acaccgttaa ttctttacat cagcggcagt gccggaattt tggaaacgat
60901 gggtaaatcc ggggtggaca ttgttagtgt ggactggacg gtggacatgg ccgacgccc
60961 ccaacgcctg ggcaagaga tgaaagtcca aggcaatatg gaccccgccg tactatttgg
61021 ttcccaggac ttcatcaaag aacggatttt agacacggtg cggaaagcag ggcagggggg
61081 gcatattttc aacctcgccc acggtgtttt ggtgggcacc ccggaagata acgtccgctt
61141 cttctttgaa acagctaagc aagtggatca attactgtaa gagcttgttg gaaaagtgtt
61201 attctgcccc ctaaatctcc tcagtaacgc tccggcaata ctgagaaact tgaattgcgt
61261 ccccccaaac ttggggacca gggggccttt taaacacact ctaacctagg gaaaaacttt
61321 gggaaaactat tgcgctatcc cttacttttg caatagtgtc cacggcccca attgttgtaa
61381 aagttctaac tgttgttgat ttctcaccaa taagccaccg gcaaaaccta gggcattaac
61441 ttcaatgtct tggtaggatt cctgggaacg gggcacgatc gccaaaaact ccttggtcat
61501 tagtaaatga tagggatggg gctttgtctc cctgcagtt tgtaatccca tctatccat
61561 cagatcctga taaatctgat aacaaatttt accctcatca gcctgttaa tcacatccat
61621 ggttaagggg gcgatcgccg ttttaaaagg cagatttttt gcctgaataa aatgatcagc
61681 caggggggat ttttgaccat tttccactaa gggaaagggt atccattgta aatggcgggt
61741 ggggttgctg gccctgctt tgggaccgct gttataaaat actaaacctt cttttctctc
61801 taaaacttgt actgccactc caaaatcccc caaggtcaaa ggactttgtt gatcttcaaa
61861 ctcccggttg acaattaata aatgttggtc cactacctta aatttattca gcaatcccaa
61921 atgggttggg gaaaaatgcc ccacaaatag atcggcgctg tagggtaaaa aaggattaat
61981 ttctggcga tgttgggtgt cggtaatgat ttttttgcga tgaatttggg tcaaaatccg
62041 caccacaaag tttattttct ccacctccag ggtcgttacc gccgtagtga tgggttgagg
62101 ggcaccggtt ttgagagcat ggtcactctg ggccagttaa cgaggccaca attgaccggg
62161 taggagatag gattcagcca tgggtgagggc aaacaggtaa ctacgttctt ggcaccgggc
62221 aacaacatta ccattaaaag caacccttga ttatgtccac cgaaaatacg ccaggggct
62281 ggggttttact tgagccgtcc ctgtactcta cccgagggg tggagagcac taccgtcaa
62341 ataatttgca aggattgctc atcttcccaa atgcgagaat ccacattcaa ttggctcaat
62401 ttggtccggc ccagatcggc ccagaaatta cgggtggcggc gatcgcttag gtaaacatgg
62461 tctcatctt ttgctttgct acaggcttcc accaagaaat aggctaattg cttggctgta
62521 atatcagaac cactaatttg aaagtgaac aataaatccc gccgttgggg ccgagagccc
62581 tgggcataga gcacgtgaa atcgtgacta gcatgatgat ccaactgacc tctgttccat
62641 atggactggg tgccaaaact ttccgtatct gtgcccttaa gctgggaaac taacagtaaa
62701 tgccttaggt taggagtggt agcaaggaca ccagaatagt acaaaattaa aggggcagtt
62761 aaattttgag aagctttgaa attccaattg gctttatcga ggggaaaaata ggctaaaaat
62821 tgattccatt ccgacataga tgtgggcata ttgtcaccaa aaattacact caaacctcga
62881 ttaactattg tttatttttag caatcctctc gtcacgcta ctaattaatg ccaagtctaa
62941 ttaagcagtg atattgctat tattttggcg caactgacc ataataaacg tctgttccat
63001 ccggtaaaatt aatctaacca ttgtcagta agccattctg ccctaggata acattcgtaa
63061 taaaagtggaa tccgtgaggt tgcaatgggt cacaaatag atgtctatgg catgggaaat
63121 gccctgggtg atatggaatt tgaggttacc ccagagcagt tggccagcct aggcattgat
63181 aaaggggtga tgaccttggg ggaagaggcc agggaaaatg aattaattgc ccaattggcc
63241 caacagcgtg gcaagcaaag cagtggcgga tcagcggcca atactctggg tccctggcc
63301 caactggggg gtacgggttt ttatgcctgc aaagtgggta aggatgaagc gggagcctt
63361 tacctccagg atttgaacga ttggcgctc gataccaatc cccaccatga aaccgctggc
63421 gaagcatta cgggcaaatg cttagtgttt gtcaccccg atgtgaccg caccatgaat
63481 gcttttttgg gcattagtgg cagtttgtcc gtaaccgaaa tggattggtc tgccttaaaa
63541 cagtcaccaat acctttacct ggaaggctat ctggtcactt cccccagtg ccaagcggcc
63601 tgcattgaag ccaaggcgat cgccgaacaa tccgggggtg aaactgtct atccctatcc
63661 gatcccaaca tggccaaatt ttctcaagac ggtttaaagg aaatgctggg gtcaggggtg
63721 gatctactat tcgccaatga agcggagacc ctggaaatgg ccggtacttc agacctcaac
63781 caggcgatcg cctactgtaa aagtattgcc aaaaactttg cctgaccag gggcggagca
63841 ggctcactaa tttttgatgg tgagaattta ttgaccattg gcaccccaa agtccaaacc
63901 atcgatacgg tgggagcggg ggatattgat gctgggggat ttttatatgg cctaaccat
63961 ggcattggact atgaaaaagc tgggcaattg gcttcggaaa cagccgcaa agtagttacc
64021 tgttatggtc cccgcctaga cacagaaatt ctgcaagaga ttttacagtc tgttcaagca
64081 gtttagaaca aaaagctact tttctcccaa atcataggag ggactaagcc agccctaacg
64141 ccagaagaaa tagagggatc ctccggcaat taagagcatc actatccaag taatatagta
64201 gcccagcgg ctgtttagtt ctggcatttc tttgaagttc ataccgtaaa ccccggaat
64261 aaaagttagg ggaataaaaa tggtagaaat gacgggtcaa aatttcatta cttcattcat
64321 tttattgctc atggcagtc tataaacctc cattaaacta gaagctaatt cccggtaagc

64381 ctcgataaah tcttaacatg gaataatgtg atcggagcaa tctcgaatg a attctttac
64441 gctcgtgtgt acgatggaat tgggtgtgtc cggcagcaga acatgcatca c tgggggag
64501 gggcnaaatc aacctttctca gygctaaaag ttcocggcga atatggtaaa cttctctcat
64561 taatgagctg ttgggattac gaataatggt gtcttctagg gcttcaatgc tttctcata
64621 atcttccaag aggggaaaaat attcatcaat taacatatca attaacaat agcaaagata
64681 atccgctcct tgttggcaaa ctttaccctg attggtgcga attctttccc ttaggggatt
64741 aaaacaatca ataattgtgc cttcctggaa agttaatagg taacgtttgc ccaacacaaa
64801 actaacctgc tcacttttcaa agccatcttc ttcocgatta ggacgcaccc gatgggcaat
64861 aaccatcaca tggctgttat aatctttctac ctttgcctgc tgggggacgt taacaatat
64921 ttctaaaagt aggggggtgta atttaaaaaa ttcocccact tcttaagca cttcttcaat
64981 gcctaaacct tcaatatcca tccaaagaa agtatttcta cctaaataag gtctcagggc
65041 attgggacta atatccgact ttcgcacggc atggctgggg ctataatcca ccaacacaa
65101 cggggaaggg ggcccatcgg gttcaatgct gagggtaacc ggttcaactac ccggtcctgc
65161 atagaagtag tcaaaataat cttcttcttc ctcttcttct tggggatgac gcagttggcg
65221 caggagaaaa tcttcaatgc cgggttgggt ttggggcatg gcaaaggctc aagaaaacta
65281 gttgatttta tgcaggcggg tttaaagtct gtttaacctt tacactttac gattttggcc
65341 ggctgatggg gccagtggaa ccagtcaaat ttaatttctg ggcatggaat ctaaacctta
65401 ccaaagcgac ggtgtctttg ggtgactgt cgtagggcta aatggaatgc ttggcgatcg
65461 aagtcggggc agaggggtga ggtgacgtaa atttcggcgt aggccatttg ccagagcaaa
65521 aagttgctga ttctcaattc tccactggtg cggataagca ggtcgggatg ggataaacct
65581 tcggtataga gatatttttc caccacccct tcatcaatgg tttctgggtc taatttcccc
65641 gattgtactt ccttggcgat cgcttggcga acatggacaa tttcttggcg gcgccgtag
65701 ttggtggcca cagtgaagcg gatccccgta ttgttttggg tatcttccat ggagcgggca
65761 atttcatcct ggaggggaacg gggcagggaa gtcagattac cgacaaaacg aatgcggacg
65821 ttttccgcca tcatttcctt taattcccgc cgtagcaccg gctcaaacag ggtcatcaaa
65881 aattccactt cttccagggg acggcccca aaaaaagcata ggcgcctagg
65941 gccgcaatgc cccaatcacc gcaacaacgc aacaaatttt ttaggagtc cccccccgt
66001 tgatggccca taatccttgg catacccttc tgttttggcc agcggccatt caccatcatg
66061 atgaccgcca catgttgggg taacogttgc tgggtccaaat ccggcggtaa tgtttctaag
66121 atgacaggtt taatagtcac ttttgtctgt tttgggcagt tgaggaaggc agccaaagca
66181 aacgcctgag tattcccca ctttgggttac tcaggctacg gctcaggcgg ctaagttggg
66241 gggtaacgga ctcccgctcc gtgggggggg catattcagt ttctagcaat tctttagtt
66301 tactgctagt gaggggacgg ttgagatttc cccctggggc cagggtaatg gagccggtt
66361 cctcggaaac gacaatacaa agacatttt cacttttccc ggtaatgccc atggggccc
66421 ggtgcctggt gcccaactgg cgggagtcac tgcgttctga gaggggcaaa ataaccocgg
66481 cggctactaa ggggagccc ctgataaaaa tggcccccac gtggagcaag gttttgggct
66541 ggaaaaatggt ttgtaacaat tccctcgaca gcttactgtc aatggcgact ccccgattga
66601 ggaaaaatag gctgtctaga atgcccgtgg cttccatcac catgagggcg ccaatccgat
66661 tttgggacag ttccttgacc gcattcgaaa ttctgtcaat ggcacggtg gggggggggc
66721 tagaactacg ccgcgcagtg aattctaaaa atctccctg gccaaagcag tctaaaaatc
66781 gctcagttc tgcctggaag atcactgcca aggccactgc tgtacccaag acaaattttt
66841 ccagcacaaa tttcaacaat tctaaatgca ggcgatcgt caccagttga gccaccatca
66901 acaccaacag tccccgcata atccacagga tttgattttc gccaaaagacc cggcttagta
66961 ggtaaaacaa accgatgact aaaccaagat cgagggcgcc atggaaaaag gggagcaggg
67021 aagtaagatc cgggggaaag ccgacatgg gtaaggggag atggctggtta ggttgggggt
67081 agggaaaggc ttaggacagt agacggttgg tagacaaac ctggcgcaat aggtcgggtg
67141 aggtttcccg ttgcagaatc aggtttgctt gtccttgggt tactagtaca gcggcggggc
67201 gacctaaacg gttgtagtgt gaagccatgc tgtggttata agcaccagtg gcagccacta
67261 ccataatgtc ccttgggttc gcggcgggta gggccacatc cttaacgaga atatcgccg
67321 actcacaatg tttcccgccc tttcggtaat ttctggttgc ttcgctgttc atccggttgg
67381 ctagggcaac gcgatacacc gatgtgtagg tgcagggcg gggattgtcg gacatgccgc
67441 catcgacgga aatataggtg cgaattattg gcacaacttt acgcccctcc acccgatagg
67501 ccgttacaca ggcagacccc accagggaa gtcccggctc agcaatcagt ttggggtagg
67561 ggatgttctg gcgatcgag gctttggcaa cggagatggc cgccacttgg gccattctt
67621 cgatactggg gggatcatca ctttgggtgt agcaaatccc taggccaccg ccgatgttca
67681 attcgcctcag gggcaagccg taggtcaagc ctttggtaaa ccattgcact acaacttccc
67741 ctaaatcttt gtggggttga cgctcaaaaa tttgggagcc gatgtgggca tggagtccga
67801 gacaattggag tgaggggtgt tgggcaatgt aggtgaaaac cgcttctagt tgggtgggat
67861 caaagccaaa tttgctgtcc agatgccccg ttttaataata ttcatgggtg tggcattcga
67921 tgcctggggg gaggcgcaac ataattctta ccggtgcccc tgagtccggc gctagtttgg
67981 tcagggtttc cagttccaac cagttattga caatgatggt gcagttaatg gcgatcgcc
68041 cttggagttc ctgcaccgat ttgttattgc cgtggaagta aattttttct gcaatctcag
68101 cttcgtccca gcttaattgc ttcagggctg aaaccgtggt gaataattcc ccgccggata
68161 cgacatcaaa tcccaacct tcttggggcg cgatcgccac tacggctaaa caactccagg
68221 ctttgggaag gtagattact tgactggaac ccggatagtg ggcttgggaag gattgacgat
68281 actgctgggg cgcttgcgc aggggtggtt catccaaaat gtagagggga gaacaaaact
68341 gttccaccaa ggctgggacg gagcaaccac caatttctag ttcaccgttt ttattaataa
68401 cggccgctcaa cggtaaaaaga ttttgatttg gggaggggga ggccgggggt ttttaataag
68461 tgcttccggg ggttgggaag ggcatttctg tggagagcat ggcaggggga tttttaatac
68521 agataaaaat tagtcggact ggtcggacat cggagctaca acaaccgggg gcaaagcaaa
68581 accctaaaag tatcaataac tcttgttaata tcccagttta tcaatcttag ggatgattgt

68641 tttcctttctt ttttgggtgt aacctgggtc aaggagaggg gtttactact ctttctggag
68701 ttaatttttt ctgcagttct tgcctaatgc ggtgcataat ggaattttga tttttagagt
68751 tgagaatata cgcaccacac gtctttggcc cggttctccc ccaggggggc ccatgggcta
68821 aatagggttt gggtcacttga ccgatcgcca aggtggacac tccggccaca ctatgtggg
68881 tgaggggcaac ggaaatatag gggggcaagg ccaatcccc gggttaagggc accgtcaaac
68941 cgagtaaac cttgagggaa ctaaggccca accccgccaa aaattcgctg gcagtgatgc
69001 cccccatact caccccaatt ttttgcaaca gggcgatcgc cgccgtttgg gtcagtggga
69061 aaccatacag cttggaaagg gaaataatca gagccacatc caccactgct ccgctgaata
69121 aatccagcac gggtcaccgga ttgagagcaa tggccgtcgc cttgaccatt actgcttttt
69181 ggagaatggg attggcttgg ctgtcccgcg aacgcatttt ttgttgcaat aatttatcat
69241 tcagattatc agcaaaaagt aaagtattta aagctactaa agattttccc tcccgttgca
69301 ataaatcaat gatttttaag cgcaaatatt caacttttgc tccccccga tattggtaac
69361 gctccaattt tccctgggta ttttccctca attctgtcac caagggaact gcagaaacta
69421 agacaatttc ttctggagac aataattctt tcaccggttc atcgcaatt ttttcataaa
69481 ttaattgctg atccgtcgcc ggatattgat caattttatt aaatactagc aacatgggtt
69541 tgcccaccgc ccgcaatcgg gacaaggctt ggaattccac ttgggacata tccccggcaa
69601 tgacaaaaca aattaaatct acctgttggg ccacggcgat cgccaattgt tccggttctt
69661 gaccctttac ttcattcaatg cccgtgtgat caattaattg taattgggca ttgccccaac
69721 cagaaatggg aacgggtggac aatccgtcag cttgggtcag ttgccaggaa gcagattggt
69781 ggggtctggg aacaccatgg actggcccag tggtgaaaac ttgctcacct aaaagagcat
69841 tgagcaggga agatttcccc cttcccacta aaccaaagc cgcaatttgc actactcctt
69901 ggttttaatt ttctagcatg gtacagaggt ggttaatttc cttttccagt cctgtttttt
69961 ccgtagtatc gagatcaatt ttttcaacga tcgcccgtca actagcctgg gcttgctgat
70021 aatttaaatc ttcttgaatc gcgctaataa tatctaaagt ttggtctaaa tcagtcaagg
70081 aattattatt catgctacat cctgtctaaa accggaatgc ccaataaaga cagacccaat
70141 ttcagcgttc tggctgtgag atcacagagc aataaacggg aaccgcgctg gggatcgctt
70201 gccttcaata ctggacaatt ttcgtaaaaa cgggtgaaaa ctttgcttaa ttcgtaagaa
70261 taatcacaaa ggcgattggg taataaacta atttccaccg tttcaattac gtcgcaaat
70321 tgtaaaaagt ttttagccaa aactaactcg gttgggtcag tcaacacaat ttcaccgctg
70381 tccactctgag caaaatcaat gcccccttcc cgactaatac tttgaatgcg ggcgtaggca
70441 tagagcatat agggagccgt attgccctgg agagccaaca ttttgtaaaa actaaacaca
70501 taatcactgg tgcgattttg gctaaggctg gcataattca ctgccccaat gccaccctg
70561 tgggcaactt ccgtcttaaa ttcttcagtt tctgatcgtt cttctgctgt taacagggtt
70621 tctaaatcct gtcttgcctg agttacggct tcttccccc tgcacaaacc aaacggcaca
70681 tccccgcgcc tagtttttag ttttttgcca ccagcttttt cagctacctg gaaaaattga
70741 tggactactt gagtcgggtc agtcagaatg acataaatga tcttctcagc gccatcgggtg
70801 gcaaaatgat tagcttgccc cgcacgggtg ggccaagtcc gtgggtggcat agttataacc cccgtcggat
70861 ttttaagcga aattcaatgc ggcacggtag gcgatcgccg tctttattag taaagccatc gaggaaaacg
70921 ttttgcaacta ttaacggtag cggtatcttc caccagcaaa tcttttccct gcaatagttc caccacaccg
70981 cattgagcac cggtatcttc gattataaaa tgattctccc cgttctcaa tggtgatata attgccaagc ttttaactt
71041 ggcaaaaagg gaaattcccg tgcgatttgc cgcaaccacc gcttgacggg aagtttcccg aaattgttca
71101 taaatcagtt ctgcctggag atctttggtt agcttgctta taaaagggtg ctatgcgcc aatatccagc
71161 ttcgcatccc ctgcctggag cgcaaccacc cctctggata acctctttta aataggtaat taacatacca
71221 tcttggtcaa atctttggtt cactaatgac cctctggata acctctttta aataggtaat taacatacca
71281 gcatccgcag tcaactaatg cccagtctcc ccagtgggtg aggcgcaaaa catcatagcc tcggaattcc
71341 aattgggtgc cccagtctcc ccagtgggtg aggcgcaaaa catcatagcc tcggaattcc
71401 agtaaccgag ctaaaccaatg ccaataaatg gtagaccgga gatgaccac atgcatttcc
71461 ttcgcaatat tgggaacttga aaaatctacc actatccgtt cttcgccttt aactaatgac
71521 actcctaact gttgattttg ctgaagttta attaatgtt cccccagata atcaggcaat
71581 aacttgatgt taataaaacc tggcccagca atggttaacg gttcacaaat ttcgcttaaa
71641 ttaactttat ccacaatctc catggcgatc gcccggggcg gttgaccaa gttgactagc
71701 aagggcaggg caatggttga ttgaaaatca ccaaatttag gattggaagc cggtaaccat
71761 aggggagttg gtagggtaac atcagatgga aactgacctt ccagagcttg ggcaagtgga
71821 tcattaagtt gggtcagaat cgataccatg gacgatgatg ttaggggaag tgaacgttaa
71881 ataataaaaa actaagggtc gggctggaca ataatagccc atgataagcc ccgatgtaac
71941 cagtatatta gattagttgc cctaagtgat ttatacaata gaatttatcg actataaca
72001 ctaacttcca gggtaatcaa tggccataaa aatgccatat ttccgcctaa ttaagttttt
72061 ccaattggcaa atattctagt ccccaaatag cactaactaa atataaagg atagctttta
72121 cttcttcata aaccgcacct aaatatctcc caatcacgcc taaactaatt aactgcactc
72181 ccccaagaaa taagatagcc accattaggg aggcgtagcc tggcacatca acaccaaggg
72241 ttatgggttt caaaatcaaa aagctagcgt aggcctaagg taacagtga atgattgatc
72301 caaggtaagt ccagactttg aggggaagta aactaaaaga aaaaatggcg tcccaagcaa
72361 aattccagag tttccaatag ttccattttg tttgtccttg gaagcgggtt tcccgatcaa
72421 ataaaacgaa agtttgccgg taaccacccc aggcataata acctttcata aagcaggttc
72481 tttccggtag ctgcttaatc gcattaacca ccttgccgtc cattaaacga aaatcgccag
72541 tattgggagg aattttaatt tccgtcatgc gcccaatcac tttgtaaaac attttggcgg
72601 tgaattggtt taccacggt tccccctgcc gtgaacgacg ggtggcatag acaatatcat
72661 aaccttcccc ccatttatca actaactcat ggaatcaatt cgggtgagct tgcaggtcgg
72721 cgtcgatggg aataacagcg ttgcccgtgg cgtaataaat gccagcgga agggcaattt
72781 ctttgccaaa gttacgagc agattaacaa tcttaatttg gcgattactt tgatagcaat
72841 caatttaatt tttgagggtt ttatccttac taccgtcgtt aacacaaata atttcgtagg

72301 ttaatttttgag gggagtgctt aactccagta aaggggtaaa taaattt aggttatott
72961 ccttggttgta ctttggaatc aataatagctt gttttaggtt tatagatgta atttatcttc
73021 tgttaatttta gtcagtgcat taacgccttc gcccattggt gtgatctagt tagaatcaat
73081 gcagtttggtt aatggaacct actgtttccca tgcctatggt cagtggtcta taaataattt
73141 cgttctctcgg cactggcttg gtaattcccg tagcatttcc agaataattc cagaaaatta
73201 ccatatgcaa gctcactttt cccagcacgt tccctttgaa aatcttggtg ccattgaaag
73261 ttggctcagg gctaaagggtt acgccaatcag tcaaacccgt ttttttcagc catcttttag
73321 ccttctcttct ttggacgcca ttgacctgtt gatttgctctg ggccggcccca tgagtgtcaa
73381 cgatgaggcg caatatccctt ggttggtgca ggaazaggaa ttcattccgtc aggcgatcgc
73441 cgttgggaaa ccgatattag gtatttgctt ggaggcccaa ctcattggcca atgcctagg
73501 ggcaaaagtt tatcccaacg ctgtcaaggga aattggctgg tttcccatca tggggcaaga
73561 aggttaaatca cagtcagggtt cattccagtt tccccccagc cttgaagttt tccactggca
73621 cgggtgaaacc tttgattttac ccccaggggc agagtttaatt gcctccagcc aagcttgtca
73681 gcatcaggct tcccaaatg ggcgatcggg gatcggtctg caatgccatt tggaaactac
73741 ccccacagcg gccaggctt tagtagacaa ttgtgctgat gaattgatcc ttggccctt
73801 tgtgcaggat gccaccacta ttttgccga ccaaccaagct agatttgcca ccatggggcg
73861 agttcttagtc caattgctgg aattcttaca ccatcaagtt attaccctg cctaattccc
73921 tggctcccaa tccctagaag cggagaatat ggcacaatct agggagaata ctacggtaac
73981 aacaccatct ccccatgatt ccaaccgtca ttgaaacgtc tggcggtggc gatcgcccc
74041 ttgatatttta tcccgccta ctcggggagc ggattgtctt cctggggcaa gaagtcggg
74101 atgagaacgc caatttagtt gttgcccac tgctgttttt ggaagcggaa gatccggaa
74161 aagacatttta tctttacatc aactcccgcg gaggctcggg gtcggcagga ctagggaatt
74221 tcgacacccat gaaccagatc cgcctcgatg tgtgtaccat ctgcatcggt tttagcggca
74281 gcatggggggc ttttctctt agtgctggag ccaaaggtaa gcgcatgagt ttgcccact
74341 cccgcacatc gattcaccaa cccctagggg gagcccaggg ccaagccacg gataattgaa
74401 ttcaagccaa agagattctt tatcttaaa cactacttaa ccaacatttg gccaacaca
74461 ctggcaaatc cctagaggaa attaccgcg atacggaaag ggatttctt atgtccgtg
74521 aggaatcgaa ggaatatggc ttgattgacc aggttaattaa cgtcgtctt tccgccagt
74581 accctatttta accgctgtat tagctcccca atagctgtta caaattgacc cgaccataaa
74641 actttcccaa tccctctctt gactgtcctt gaacattact tccctcttt ctgcccctag
74701 tcatcagtat cccgacgccc tgggtcgttt tggcaattat ggccggcaat atgtgctga
74761 aactttaatg ccggtcttga cggagtttga ggaagcttac tatcgctacc gggcgagag
74821 tctctccag gaagagttag cggggttatt aaaagactat gtgggcgtt cctctccct
74881 ataccctgg gaaagattaa gcgccatta cgcctgtccc gacggaacct atctttgat
74941 ttaccctaaa cgagaagatt taaaccatac gggggccccc aaaatttaata acgcccctggg
75001 ccaggttctc cttgccaac gcattgggaa ctacggtgtg tgctcgttt ggcttggaa gcatctcta
75061 tcaacacggg gtggcaacgg ctacggtgtg agcggcaaaa gctgaatgtc tttcgcatga atttgcggg
75121 catgggggtg caggatatgg agcggcaaaa cagcgggcac tggaaacctc aaggatgcta cctctgaag
75181 ggccagggtg caaccagtca cagcgggcac tggaaacctc aaggatgcta cctctgaag
75241 aatccgggat tgggtcacca atgtggaaac taccattac attcttggct ctgtggccg
75301 accccatcct taccatga tgggtgcggga ctccaccgg gtcattggcc aggaaactcg
75361 ccaacaggca ttgaaaaaat ggggcgttct tttcattgat ttgctggct gtgtggggg
75421 cggctccaac gccatggggc aaagcattgt ctcgggtaag catgcccga ctttaacct
75481 tggatcgaa gcggcagggg atggggccat gagttattta ctccaggata aggagggtca
75541 gggtaaacgg ggggtgttac atggggccat tttagattat cccggtgtg gccacgata
75601 agtaacggaa gccattcca ttagtgctgg gacgggcaga atattacagt gtcaccgacc aagaggocat
75661 tagctatctc aaggatgcgg cgcaattgga aggaattatt cctgctctgg aaactgcca
75721 caccgctttg cagagattat ctctctgccc gcaactgaaa aatggcgagc aatgtgtgat
75781 tgcctttgcc tacctagaga ctctctgccc ataaggacgt ggcattgaca atggattaa tccccaggc
75841 caactgctcc ggccgcgggg ccttaaaagt ctctgcttcc cggattaggg taaaagcgcc ccaataatag
75901 aatttaacgg gtcaaatttt gagttggagc atggcttggc ggagggcagc ggctttgct
75961 ccagggaata actcttctt ttggtaaaac tgggtcatca gttttctgt ggaagcatca
76021 ggctccggat gttgccattt caaaataact ggttaccctg cccgaattag ggaacggaa
76081 aatccctgct gttgccattt cccatcgcc ggtgatttct tgtcacaggc actaaggatg
76141 tccacactcc agaggctaac cccatcgcc ggtgatttct tgtcacaggc actaaggatg
76201 aggcggatta gcaatgtccg catggagggg gttagtttca aaatgggtcaa aaatctcgc cgctgtgatg
76261 cgccccgggg tgcctagtaa atcttctttg ctttgggtcc gtccgcctg caggtaaatg
76321 gcgctttcca aaccgttttg ctctcctaa gaccgtctgt tccctagctt gggcaaaatg caacactca
76381 gcccggggca tttgggcca gttgaccaat ttgttttgc tccattagcg catttggttaa attatcgagg
76441 accccaaca gttgaccaat attgtttgct cacttagcgg ggggtcagatt taatgcctgc
76501 tttatcggtt gttgtttttg ttgggcccgt taaatactga ccattactgt cctggagagc gggaaaggga
76561 aggttggtgt gtttctcaat taaatactga ccattactgt cctggagagc gggaaaggga
76621 aggttggtgt gtttctcaat taaatactga ccattactgt cctggagagc gggaaaggga
76681 aggttggtgt gtttctcaat taaatactga ccattactgt cctggagagc gggaaaggga
76741 atgccaata aggtcctctg cagaattttg tgaagtgtt gtagggaggc tgggtgacgga ttgtctagt
76801 aggtcggcaa tggggtcgat ggcgggcaat gatatacaga tgcaaatctt ggttgaagtc catctggcg
76861 tgggcggtgc ggcgggcaat gatatacaga tgcaaatctt ggttgaagtc catctggcg
76921 gtttgagta actgcacaaa atccacgtct tagatgtaca gcttgattgg ggaagcgaga
76981 aattccatgg tgcggttggg ggcaatgaca tagatgtaca gcttgattgg ggaagcgaga
77041 tcttgggtgg gaatcagagc gtaggtgacc agggtaactt ggcgatcgcc agcaatttt
77101 ttcaggggcg caatggtggg ttttctgggt gggataaaat tagcatctcg ggcaaacgt

77161 ttattgagca gctctactaa ggcctctggc cggccccgtt cggtaacttc caaagctata
77221 ggggggttat ttggggaat taaactctcc tggaaaagaa aataatcgta cagataggca
77281 tcaaaagttag aaactcttag tccatcaactt aaactctcgc tggtaactga ttcaaatata
77341 tcgatagctt ggggtcaaaaa taaggtagat ttgtcatatt ttctttgatc aaactcgaag
77401 taaccaatat tgctgagaat ggttgcttct agccccacat ttttaactgc tcgactgagg
77461 gacaaagcct gttcgtagta atttaagtgc tggtcataat cctcacgggc atagtaaat
77521 gtcccaatat tatttaagggt taaagcttcc ccatcccggt ctttaatttc ccgacgtagg
77581 actaacgctt gttgataata gtccatggct tgattaagtt caccacaagc gtcatacacg
77641 taaccaatat tgctcaaaat tgctccttcc accaggcgat cgccagtttc ttgggatatt
77701 tttagggtct ctttgtagta ggttaaagct tcactctttt caccaacact atcatagagc
77761 aatgcaatat tatttagtgc tatcccttcc ccagagcgat cacttaccac cctgggtaac
77821 tccaaagcct gttgataata ttctagggtc tgggtttttt gccccaatcc atctaaaact
77881 aaggcgatgt tactaatgac tgaagcttgg agggattggg cccccaccgc ctccgcaatg
77941 attaaagatt cgatgtaata ttgcagagcc ttatcctttt cgccaaagcc atcgtaacac
78001 aaagcaatgt tatttaaagc cactgcttcc ccctggcgat cgcccaactg acgggacatg
78061 gttagggtct cttggtaata ttccagtgc ttctcccttt ctctaagtt gttataagcc
78121 aagccaatat tgctgaggct agtgccgatg gtttctaaat cattgaggct ttttcttaag
78181 gctagggtct cagcgtaata ttgcaaagct ttttcaactt ctctaagtt atcgtaggct
78241 actcccaagt tattaatggt ggtcatttct tcggttttgt cgccagcttg acggtataaa
78301 accagagcct gttgataaaa atcaatggct ttttttcgat ctgctaaggc attataaata
78361 ctaccaatat tatttagggt agctccctct agggccttat cttgcaactg ttgggccaaag
78421 ggaatcgctt gttcataata ggccagagct tgggattttt cgccaaagtc agaatagatg
78481 gtgcctaaac gattgagagc aaatactggt tcccgattaa caatgcctat ttgccgataa
78541 aattccaaac cttgggtaaa taattcgatg gctggagta aggattcctt tgaaccttca
78601 tccatcatgg cctgggtctt aattaaggat tgatgcctt ggatttcgac tagttgggta
78661 gcatcgggca gaataatttg cagtttatat tttcccgta cccctgattt attactagta
78721 accactaccc catacccttg gggatcgatt tgattgatta aaatccccgc attagtgtca
78781 tataaatcat cattttctgc caacttatta ccttccccat ccatcaagat taaataagga
78841 tcaaaatctt ggctttctag gtaaatlaag acgggctgat cggcggttaa tttgagggga
78901 taaagggtcaa aaattactcc attgtccgca cttaaatccc cgccttccaa ctctccgacg
78961 gcgctatcaa taatttctac ctgttcttgg ctataggcag ggcaggaaag aaaaaaaaaac
79021 taagaattaa tagccaaggg cagcgcatgg tggtttctcc aggcaaaagt cagaattagt
79081 cgagatcagc taggggaagt gagcaaaaac tataattatt agctagtatt tgataggcta
79141 ttgttctctg tactgggcag tcttcttctg cgttcgctct agatagctcc catgtctgat
79201 ataaacacaa ctaatatctt ctccctggag agcaaaaggc atcgccagga ttcccaccct
79261 tcaaacctgt tagtgattta tctccggag agcaaaaatt atggggcagg gccaacggag
79321 agtgatgcac tactacgctt agagggagta tcaaaaattt atggggcagg gccaacggag
79381 gtcagggcct tggccgatgt tagtttggcg atcgaaacgg ggagttactg cgccattatg
79441 ggggcttccg gatcggggaa atccaccatg atgaatatta ttggttgctt agaccgtcct
79501 accctggggc actattttct tgacggggaa gatgatccg gtttgagtgc cgatcgccag
79561 gccaaaattc gtaaccgcaa aattggcttt gtttttcagc aattttacct gttgccccag
79621 atgagcgccc tggaaaatgt catgttgcca atgatctatg cgggcatacc agcggaacc
79681 aggaaggaaa aggccattgc cgccttgggt agagtgggtc tgagtcaacg gttacataac
79741 cgtcccaatc aattgtccgg gggacagcaa caacgggtgg cgatcgccag ggccattgtc
79801 aacgagccgc tgttgctgct ggccgacgaa cccactggag cattggattc ccacaccacc
79861 gaggaagtgt tagccatttt tgaacagctc catagcacgg gcattaccat ttgtgttggt
79921 acccacgaag ctgatgtggc tagccattga gaacgaatca tttctttcca ggcaggccaa
79981 attctccggg atcagatgat taaaaccatt cccacggga tagaagaatt tcgtaacaaa
80041 gaggttgggt aatctggact tctagccac actggctaaa ttggtcggtt caccactgca
80101 tagtcccctt cccggttatc cggcaatagg aaccccttac gacaaagaac atcaatgggt
80161 tctttcacct tttggggatc ttccgcaagt gccacaatac attcactgac tgtcgcgcgc
80221 atcgcccttg cggcacagggt ttttaataatc agcacatcca gctgttctgt gctgttaact
80281 ggcgggggcg taactatcgg agtaggagg gaggctaggt aatgtttgtg gttgtagatg
80341 gcattgaact ttctctcatc catggtgcca aggataatca catcaataaa ccccaatatt
80401 gtgggaatac ctgtccaaga aaagatgaga taggctatgc cgcgaatat atggcctaga
80461 taaaatttat gtagtccaaa actgccaac aaaagggcaa aaattagggc aacaaagcga
80521 tttttcatag cggctgggtg aaggaaaccg gcacctactg acgatgtcga acaacaaaag
80581 cggaatgggt ccaagccccc ctattgtcat agtaacggat cagcctttgt cgctcgttgg
80641 ggcgcaccaa ccagcccaact tccccgaaa agggttgtcc caattgcagg cgatcggggg
80701 tgcaagaaga agcgccgtct ggtagtagta aaaccttgct ggggttgggg ccaagaaaat
80761 gaatctgac gcccatcact ttcccttgca tcaactgaag ttgtccttgc acagtcaccc
80821 gttgttccac ggaatcccc gtttgactca ggctaatttc catagtgtc agttccggtt
80881 ctgcgcagtc ggggtagcca gtataaacct ggcattgcca agtgcccaat agttgtccca
80941 cctttaatgc tgggtcttcc tgggcatac tccccggcg aaattctcgg ataaacgtca
81001 ggctagctaa gcttaactct ttgtcataca attgacgaa tctcatacgg cgatcgccat
81061 ccacaaagcc aaattccgcc ccaactcac tgaaggagc caactgccat ggccctttgg
81121 aaaaagcacc ggtgcaaaag aaaatgattt gtcgccctag ggaacggtaa tcttggtat
81181 agtcctgagt gggagggtct tggtaatcgg gattatcgta gcgcgcagg cgaaacttga
81241 ctaacttgtc atcatccaa ccttccaggg tgagtatgga aggaattttg ctcaatttt
81301 ctcttgggg agataagcg gtaaaactgc cctgccattc cctaaaatt ttgagaaagt
81361 tttccagtt agccatgggc atttgccctt gtgattgggt ccgctgtttt cgaacgatca

81421 atttaaacat taaat... cttccatt... cttccatt... cttccatt... cttccatt... ggcaagcttc
81481 tccagaaata cgggtt... atcggggg... atcggggg... atcggggg... atcggggg... ctagttctag
81541 atttttttca accccccc... ggaacctt... ggaacctt... ggaacctt... ggaacctt... ctcatttgc
81601 cccctgggtt tgggtatt... gtcctgggga... gtcctgggga... gtcctgggga... gtcctgggga... cggtaaggac
81661 tttggcccg c aagaagtaga gggggctttt gggggctttt gggggctttt gggggctttt gggggctttt agttacctta
81721 attgacact ctgaaattta tgggttttgg ggaatttgcg actaaatact ttcctttgcc atggcgttgg
81781 cgagaaaaaa cccaaaaagt ggaatttgcg agctttaact gccagtctgg aacgtttgca aatggacacc
81841 cagcgtttct acatca...aa atcggggg... atcggggg... atcggggg... atcggggg... ggatttcag
81901 atttgtttgt atcaaatcca tggggcccta gaatttttgg tcaaaacacc cgtatccagg cgtatccagg cgtatccagg cgtatccagg cgtatccagg tagtaactat
81961 gcggtgttgg ccgcgcgagt caaaaagggt cgcacacgaa tgttttagcag cccaaggcat tccctcgtct
82021 tccgcccagc aaatggcgat cggccacgaa tttgttcaac cgggagattg aaagcaacgg tattttgacc
82081 agcaatcaag ttccttattc tttgttcaac cactattttg gcctatagtc ccttagctca ggggctactc
82141 caggcccgcc agctcaacgt cactattttg agtctccagg gtgcccgcg tcttgacccc
82201 accggcaaat atcgccccga aaattctccc gcgaaaatta gctcccttac ttaccctctt ggataccctg
82261 cgttttagta ccaaaggatt ccttgcccaa attgccccta attgccccta attgccccta attgccccta attgccccta agcccaaggga
82321 gcagataaac atgacaaaac ccttgcccaa gcttcccaag ctcaacagaa tggcggagcc
82381 aatgttattc ccattccggg ggcacaaaat gaacaattgc gaagtgtgc ccaaggtatt
82441 ttgggggtgg agttaaaacc gttggcaaac caagtcttga cctttctttt tattccctta
82501 taacaggtat ttaaaaatgt gttggcaaac gaaagccctg aaaattcaac tcaatcccc tcaaaactac
82561 actgttctta ttagacacca gtaaaactta accctgggta aactcatata acagccaaat
82621 tggcttagaa gatttttaga gtaaaactta accctgggta aactcatata acagccaaat
82681 tcccactccc aaaccgacaa aattcggcag ccaggcagcc aaagtgggag aaattaaccc
82741 aacaatgcct aagctaccac tgaaaaatcc cagtatgtag taggcaaaaa taatcacaat
82801 ggttaaacca aagcccggtg ccgcaactat cctttggggc ctagctccga tcgcccgaacc
82861 caccaccgca aatacaatgc aaacaaaggg aaaagctaata tttgttccg tcttaacctg
82921 aaaaaattga gttttctttt catcgccaat taacttcaaa attttgatat agtcctgggc
82981 ttcggcaatg gtcatttctg agggatctcg tccctggcga gcaaaatcaa aggcgattg
83041 gggtaaagca atctgtttat tgggtgaagg aaccgctct tggataatct cggtttccgt
83101 caagcgatac acagtaacct ggaagaaatc ccagcgttta ttgtcattat tccaagtggc
83161 attatcgga agcacaatat gtttaagatg gttttctgtc cattgcaata ctgttaagtt
83221 ttgcatttct ttgcgctcaa atttttctgc ataaactaaa ctttttaacc gccgtgccgt
83281 ttgaccatta tgcagttcaa tttttctcaa ttcagggtaa aaaacatccc gattttgcca
83341 aaaaggatgc tccctctga tggattcaat gaggatactg gtagctcgat agttagccac
83401 cggcactacc catctgcca acatcaaggc ccagcccgtt accagcagac tcaataccac
83461 gcgcggcagg atcaatcggt acaaatctac gccacaacta cgaatggcaa tgatttcaca
83521 atctccacta aggcagacaa aggcacatcat cgtagctagc atcaccgcca caggtaaaga
83581 gtaagcgagg aactccggaa ctttaagcag tagtacttct gccgccttgg ccactgggag
83641 attcttttca acaattttgt tgcttaaatc ggacaaatta ccgatcgcca gccctaaact
83701 ggccaccacc ccgacgctaa ataaaaatgg ggaatcagt tgccctggcc catagcggtc
83761 catgagggaa atgcgagcca aagaattggg ccactgcccc aagctgggta aggttttaga
83821 caagaacatc acagattttc aagcttttca atgactaaaa ttcctcaaat ctttaaaatt
83881 ctgcattcat gggagtgcgg ggaaaaggaa tcacatcccc aatattagcc atgcgggtca
83941 tgaactggac aatgcgctca aagcccagac caaatcctgc atggggtaaa gaaccataac
84001 gacgtaggtc aagataccac catagatctt cttctgggac ccttctggac tgcattctgt
84061 gagttaatat atctagctgt tcttccggtt gggaaacgnc gataatttca ccaattttgg
84121 gggctaaaaa gtccatagca tccgacggtt tgccatcacc atttaagcgc atatagaaag
84181 ctttaatatc tttaggataa tccgtcacaa tagttgggtc tttgaacacg gttctgtcta
84241 aatagcgtc atgttccgac tgtaaatcta ctccccaggc aacgggatat tcaaaacttt
84301 gatccgcctt ttccagtaat ttaattgctt cgctgtaggc caaccaagca aatcattat
84361 taataatatt gtccgcgggt gctaacactg tattgtcaat gcgttggcca aagaattcca
84421 tatcctctgg gcatttttcc agcacaatc taaaaatgta cttcagaaat tctctgccc
84481 attggcgatc gcttctagg tcacaaaagg ccatttctgg ttcaccatc caaaattccg
84541 ccagggtgcc ggacgtattg gaattttccg cccgaaaagt gggacaaaaa gtgtaaacat
84601 tctgaaacgc tagggccatc acctccgctt ccagtggcc actaccggtt agataggcct
84661 gtttaccaaa aaagtctga ctgtaatcaa tgccctcgcc atttttggg accctttgta
84721 aatccaatgt ggtgacctg aacaaatccc cctgccccct cctgaaaaaa ttggtgaatg
84781 tcgggggtgt gacccagagg aacccccctt cctgaaaaaa ttggtgaatg gcggtggcac
84841 aagcgttacg caccctcata actgcaccga tggatttggg gggggggcgc aggtggccaa
84901 tggctccgca aaattcaaag ctgtgacgtt ttttctggag gggataactg ccagggtctg
84961 ctccccccaa caattcgagt ttggttgctt ttaactccac ccgttgcctt tttccggcg
85021 aaggggccaa ttttccctcc accaccagcg ctgcccctgt ctgtaattgg gataataggc
85081 gatcgtaatc cgctaaactt ccattccagc ccacttggag gttagccaaa ctagagccat
85141 cattaaactt tacaaaacta aaatccttga ggggtcgttt agtgcgtaac catccttgaa
85201 ccattacttg gtcacggccc tgaccgtggc ggagaacttc aataatgcgg cgtttgttca
85261 taaaccccaa agaactagag agagagggac agtgggtgcc actattaac cagggcaccg
85321 agccaatcct agggtaacca atcccgcac aggaagcgat tcccagcaaa ccagacaaaa
85381 atctgaccaa cccagaaaaa aatattttga ccatcaacaa taagggtgta tgatggctaa
85441 tctgtaaaagc aatgggtcga tgcggagtgt gttaatgggg gcggactgta aatccgctgg
85501 ctatgcctac gctgggtcaa atccagctcg gccatccct tttgcccctg tagctcagtg
85561 gtagagcaca ccttggttaa gggtaggtc acgagttcaa tctcgtcaa gggctttcta
85621 aactcgacta tcaagtctgt tcgatggcta aacggcgatc ggcgatcgtt tagttatcac

85581 tattcggtctt caotgigggt tgcattatgc gttcggggtt ctattatcca gatgaatttc
85741 ccccatccca ctcggcctgc ccaagagggg gagtttcgat agagtaaaat actcccatag
85301 ttttatcgga actacagggt taatatataat taacttcgat catataagta aagaaaactc
85861 gttgggtatt gtagtcgcga aaagatggaa aaggaagcac cggactgccc gataattctt
85921 caaagtcagt ttgtaggaag ggcaacataa aaggagagac ctgaatggga ctggcaaaaa
85981 ggagttgggt tgtatggagc aatccaatgg cagagccac ctgaatggga ctggcaaaaa
86041 tatttcttct taaactaaga ccaacgtagc cgcctggata gccaaaatca gaattctctaa
86101 aaatattaaa ctctaaacta acgatggaa ctgggactag gtgattgaaa aaaccataat
86161 taggattgat aatttcaaaa tcgtaggcag cccagcccc cataggaaaa ttattaacat
86221 ccggttctgt gtagtctata tgccaagaaa aaggagaaa agctaaatat ttgtcagtta
86281 aattccacca gtttacagga gattcaatga ttgtttcatt atgattccaag tcatggagaa
86341 tattctgctc attcgtctgc tgataacctt gtgaagcaag acttagttct agatttgagt
86401 gagggctttc atttgataca acaagataat cttcttttat taatataggt gaaatgaaag
86461 agcttaaatgt tagggatgaa ttggagctta attcaaaatt agtttcaaga tgaatgattt
86521 tttcttcata ttctaaattg ctccgatcga tttagattt ttactggatt aacaccggtt
86581 ttgaatggtt attaataggt agattgctta cagtcactgg aatatcttga tctgaagagt
86641 tattttcttc aagatctatt tcctgtgcat gtattaagtt atttgaaaat aacaaaagaa
86701 ttaattgcag caaaatagct cttgctacca tttttacgtt agtaacaaaa aaaatggtat
86761 cctcccattg attgaagtta tagccaagaa aaaataaaat cttcaaagct gcgattaaat
86821 aactgaaagt tcaccagtaa aatgatgatt tctcgctaag tcttattact aaaaatctac
86881 taatatcggc gagatttttc caattcttct aactcgaaaa tagaaaaattg cataggcatc
86941 tatagatttc atgagtttct aatttaattt tttatttatt ctcagttgaa agaaatttgt
87001 catcgcaaaa gcaataccta aaaactaaac taggcggcgc atgtcttcgt tagaacctag
87061 gaggactaga atcatcccc ggtgtaatcg ttcttgagga ggggggttaa ttttaaat
87121 ttcttcatgg cccactgcca gaacactgac gccatggttt ttgctcaggt gcagttcggc
87181 caaggtttta tcacaaaaat cttcggggac gagaatttct acaatgctgt tgttgggac
87241 taacttaaac cggtcacga tcgcccgggt ggtgagagta taggctaaat cttggccggc
87301 tttgtgctcg ggaaaaataa tttaatcaac cccagggcgc ttgaggattt tttcgtgggt
87361 gtcggaagaa acctagcta caaccgattt tacgccccct tctttaggt taagacaggt
87421 aatgatactt tctttgaggt aattaccaat cgcacaaat accgtttcaa tctcaaaaat
87481 gccagcctcc cgtagggcgc tatcatcggt ggaatcgaga ctaatggcgt taccaccac
87541 ccgatccgcc aacacttccg ccaccagttt gggatccttg tcaatgccc acacctcata
87601 gccattgaca tggagagttt cgcacactgc cgcacaaaac cgaccaggc caatcaccgc
87661 aaattgccgt ttttctcgtt gaattaaact gagaaaatga ctagttttca ttaattttct
87721 tctgaattga gcggcattaa actaaaccca aaagggccac catgagggtt ttttgggct
87781 gcatgagatt ttccgcttgg tcccacagtc gggattgcgg gccttccata acagcgtcag
87841 taatttcttc ccccggttga gccggcagac agtgagacac aatggcttcg ggaatgcga ctgtcggcta
87901 aggcaaggag ttcttggtta atctggtagg gctggaaaaat gggaatgcga ctgtcggcta
87961 aatcttctcg gccatgctg gccacacat cgggttagag gatagactt cctggggcgg
88021 cggctttggg atcgtcggtt agttccactt tccccctgg agccgcaatt tgttgggctt
88081 gttgaacaat ttctgccaag ggttcatagt tcttcggggg agccaccgc accgtcatgc
88141 ccatcattac cccaccgaga atgagggaat gggcgacatt gttgcgctc cctagataag
88201 tcaccgtaa gccttccaat ttgcccgaac attccttgat ggtttgtaa tcggccaaaa
88261 tttggcagg atgtccaaag tcgctcagg cattgatgat gggcattttg gcatggtcag
88321 caaagggttg cagatctgtc tgtttgaaag tccgcaccgc caggatatca atgtagcgtt
88381 ctaataccct agcggatatc tgaatcggct cccccgacc cacttgggtc acgctggggt
88441 ttaaatccaa tacctgccct cccagttgat acatggccgc ggtgaaggaa accctgggtac
88501 ggggtggaggc tttgtaaaa acgtgcaaga gtagtttcat ctcttcgatg gtcaaatcgg
88561 cggatttaag atccgcgcgc aactgcaaga ctttaatgcc catagccgtt atccccgatt
88621 cgatcgccaa tagatccctg cccgccaacg cgaattaagc cccattttgc catactcggt
88681 gtccaatgtg gtggtcgaat taacatcgat cgaatcact gattttgctg gtccagatag
88741 taatggtctt ggggggatgg cagtgatgtc agaaatcact aaacctggtt tctagactt
88801 gccctgtage ccagtcgctc caactccgct tgtttgtcca ggctagccag tatttgcacc
88861 tggcgatatt gctgtacttt ttccaacagc acgggattat tagctacagg tattcccccc
88921 gccataaacc ccgcattttt ggcattaccg actccctgta aggttttagt ctgcaccggc
88981 ggcatttgca caatggaata gagggaaatc actccctgta cgggtaaatg ggccgctccc
89041 acaccgatga ctggttaaag ggtcaggggc gccaccatgc cagtttgggc atactccacc
89101 ccagccccgg caataattat ccgcaagccc cgtggtggg atggccacct cggttggtac ggcaaatctt
89161 attctttccg ggggtgcgat ggcagagata atggccacct aatcgcttcc catgatgatg
89221 tcacagacgg cgatcgccgc tgccatggtg gggagatcgg aatcgcttcc catgatgatg
89281 ccgaccaggg gagaggggga agtcataaat taaattgaga tgacgaagat ggaggtttga
89341 ctttaaaactg aggttaaccg ctaatagcgt atcggaatat cttcaagatc ccaaggaaag
89401 atttttatgt cagtgaacag catccatttg gtgggaaggg ccggccgtga cctgaagtt
89461 aaatattttg agtccggtta tgtagtttgt aacttcaccc tggcgggtga tcgacgcaca
89521 agcaaaaaag atgaaccccc cgattgggtt gacctggaaa tttggggtaa aactgctgaa
89581 atagccggta actacgtcaa aaaaggcagt ttgattggt tccaaggatc gttaaagttt
89641 gaccattggg aagaccggaa ctccggtact cctcgttcca agccagtgt ccgggtcaat
89701 aatttggatt tactcggctc taagcgggac aacgccgaag ccaccatgaa taattacccc
89761 gaagagttct aatcatcggc cccattcacc ccattggtta actacggcga tcgccattgc
89821 tagccgaatt tttccatccc ttacccatgc cagaaccccc tggaagtctt tgaccccact
89881 cctccccctt ggggtgagga tactgttcat gccaggggtt tttgttgc ccaatgccaa

89041 gctggccccc gtcagggc cgggtgttgg atcaatcgga gatcgccg gttgggggat
91101 gatcgacggg gcaattggc ggaattttaa cagtggtgaat ggggttggg tgggtgggac
91161 tggagcagtg accgcccccc ttccccctag tagtccttta atttttctat ggttgcccaa
91121 accccatctt ccccgcccc ctgggcaaca atcatttacc tgttgccgtg gcataaaccc
91181 gccggcgac tgattttaat gtattccggc ctgtgggcag tgtgtttagc ggcccaagg
91241 ctaccacccc taccctact aggcaccatt gctttgggaa ctttggccac cagtggttta
91301 ggctgtgtgg tcaatgacct atgggacggg gatattgac cccaggtaga gcgcactaag
91361 caacggccctc tggcgcccg ggcctctctc gtgcaagtgg gcattggagt ggcgttagta
9141 gccctactgt gtgcgccggg gctagccctt tacctcactc cctcagttt cgggcttgt
91481 gtggcgccgg tgcgggtcat tgttgcctac cctggtgoga aaagggtttt cctgtacct
91541 cagttagtag cgtcaattgc ttgggtttt gctgtgctaa ttagtggag tgcagtcacg
91601 ggggatttga ccgatgccac ctgggtgtcg tggggggcca cctgttttg gacctcgg
91661 tttagactg ttacgccat ggcgatcga gaagatgacc gccgcattgg ggttaactcc
91721 agtgccctgt tttttggcca gtacgtcggg caaatgctca atccctcta ttggtcagc
91781 attggctgtt tattttattt gggtcagtt caatacatcc aactcagtc cccacgcg
91841 ttggcgatcg ccattgtggg ttgggtgat caatacatcc aactcagtc cccacgcg
91901 gaaccgaaac tatacggta aatttttga caaaacgtca tcattggctt tgtgtacta
91961 gctggaatgt tactgggctg gctttgacat gtaactatgc tccaatccct ttcgactgg
91021 cagattccca gaatttccct tacaatggat aacattaaga aaaattaaga ttccccggt
91081 ctttctcatt tttgtcccaa caacgggcaa aacctgggt cggcgatcgg gatagaaaat
91141 ttctctctgt aattattatt ttggagatt tgcgccatga ccattgcagt cggacgcg
91201 ccagtcgaaa gaggatgggt tggatgctc gacgattggc taaagcgtga tctgttcgta
91261 tttatcgggt ggtctgggtt gctactcttc cctgcgcct tcattggccct ggggggatgg
91321 ttaaccggca ccacctctgt tacttctctg tacacccacg gtctagccag ttctacctg
91381 gaaggggcta actttttgac cgtggcggtc tctcccccg cggatgcctt cggccattcc
91441 ctctgttctc tgtggggacc ggaagctcaa ggtaacctga cccgctgggt caaaattggt
91501 ggtttgtggc ccttctgtgc cctccacggt gcttttggat tgattggctt catgctgct
91561 cagttcgaaa tttcccgctt ggtaggcatt cgtccctaca acgcatcgc tttctctggt
91621 cccattgccc tatttgtcag cgtctttctg atgtacccct tgggtcaatc gagttgggtt
91681 ttgtctccca gctttggggt agcgggaatc ttccggttta ttttgttctt acaaggtttc
91741 cacaactgga cctgaaccc cttccacatg atgggagtag cgggtattct cgggtggcc
91801 ctactgtgtg ccattccacg tgcacgggtg gaaaacaccc tgtttgaaga cgggtgaagat
91861 tccaacacct tccgggcgtt tgaacctacc caagcggaa gaaacctact catggtgact
91921 tccaaacggt tctgggtcna gattttcggg attgctttct ccaacaaacg gtggctgcac
91981 ttcttcatgt tgttctgtcc cgtaactggg ttgtggatga gttctgtggg tatcgtcgg
92041 ttggcggtga acctacgggc ttatgacttc gtttcccagg aactgggggc tgtgaagat
92101 ccggaatttg aaacgtttta tacgaaaaac attttgttga acgaaggat gcgcgcctgg
92161 atggctcccc aagatcaacc ccatgaaaac ttatcttcc ctgaggaagt actgcccccg
92221 ggtaattgct tctaagggtt ttgcaaaaac gttatcactc gaagaaatga ctaaaaaaca
92281 aaactaattg agcaaaacat catcaattag ctaaaagtgg gagagtgtta cagctctcct
92341 ttttcttttg ccctagccga tgattattgc catcactgcc ctcaaagggg gcgttgggaa
92401 aaccaccacc gctgtccacc tggcagccta cctggcgagg gaagaaaaat cattgctgat
92461 tgatgcggac cgtaacggtt ccacgcgctt aatccgtaag tatccccaca ttgtgggtga
92521 cgttgcttcc caagcgggct tggatgaatt tccgggattg gcagagggga gcgatttatt
92581 cactagagcc atgccagagt tggatgaatt ccttagatgc actttaagg cggcggagca
92641 gattattccc accactccca accttttggg tttgttaacc aaggtagatg cccgtaccgg
92701 attggcctcc ctcaagggtt actacaaaat ggcggaaaaat tcacctctgt tcacaacgga
92761 tagtggctcg gaagcaaggc aattattaca ggcggaaaaat ttccagtcg ggggtaatat
92821 aattccccta ttgggtggcct ttgagcgggc gcgctataag gcggtgggac gggaaatttt
92881 cgttgatccc cgttcccatt tggcggggg ggttccctac cctactcccc tactagctac
92941 acctagact ttggcacaat atttgatgac cagcctgtta ctgtatcaag gtattttcga
93001 atccagcaaa gctttgtacc atcaggtttc gttgcgctgt ttgcaccaca atggcacgaa
93061 caatcccatt ggggaagctt ttttagattt agcctatggg gtgtggtttc gccatttggc
93121 tcaaaagccg gaagctacgg ttgttttga actcgatcgc ctgttggagg atgagaatcc
93181 cgaggcgggt cagagtggc cgggtgcaaa gggagaat tgggtatcaa tgcccaccgg aacagatttt
93241 atttagtgtg gacctgaatt tgatccaaat agtgggcgtt aaggcttggc aagtgcctaa
93301 ggctcgccat atcattgctt cccaaactcc aaactggggc gaaaatttgg cttatctgg
93361 gcagtgggta gctttgtacc aaggcggcca agctggggc taccgggctt tctgttggc
93421 ccaactagag tttcctgcag cgacaaaaag gcgtgggagc cgtggcccat cgattggcag acttgggtgg
93481 ggccatttat ttacaggggg tccccaaaat cgatggcggt tgccttttgc agggactgcc
93541 ggggaaaaac ccccaaaaag tccctgtca atggcagtc aggcagtggt aaatcttctt tgggtgaaag
93601 ctacgatgat gttgtgtctc atcgggggtt gcgcctagt gaagtatct cccgggattt
93661 ggcgtgaat cagtagcggc atcgggggtt acgtacctat cctcagaaat ttatcattt
93721 cttgggttaat cctttatttg tgggaaaaact tgagcgtttt aaaagttaa aggttgtctt
93781 gattaccctg ctctccttg aagaggagga tgtggtcatt tatgccacca gtaaccggc
93841 tgttgatgac ttgggtcgcc gcccgctaa tggcgatcg ccttcgccc caggatgctg acgaagtaca
93901 agaaggggat acggtgcagg aaaaattatc ctttagtgac cgttttgggt taaccctaac
93961 tcatttaatt gctaaccagg acacgtattt gatgatagta caccacttgg ctaaacaggc
94021 ggcctgggac gctaaccagg acacgtattt gatgatagta caccacttgg ctaaacaggc
94081 ttttcgccc gctaaccagg acacgtattt gatgatagta caccacttgg ctaaacaggc
94141 gcagattaat ttatcggaaa cggagttaga tttccgggct aaacaatggg ccaccaggca

94201 taatgggggga taaggccgga cagcgaggga acttggggat taattaatcg gggagcaggg
94261 ttggaattcc cccaaacatt ttcgggttta acataactat ggattgggaa cgggtgggtc
94321 taagttttcat caccgttttt ctaggcgaaa ttggcgacaa aagcgaagtg gggcgagtcg
94381 ccttggggggg aagtgcacaa tctcccgggg cgtattttct cggttccgtg acggcattaa
94441 ttttagccag tttccttggg gttctgggtg ggggcagtct agtcaatttt ttgccgacta
94501 aattactcaa agcattggcc gccttggggg ttaccatcat ggccctgctt ttactttggc
94561 ctaaccaaga agattagatc accgatcgca atttttccac ccagtccagc aggcgatcgc
94621 cattaacccg gtaactgagg ggatgggcaa tgaggcgggc gctactgtcg aacaaaactt
94681 cgattttccat caagccattc tcttggagag tgcgaccagt ggaaactaaa tccacaatgg
94741 cttccgacat gcccgtaatg ggccccaact ccaccgagcc ataaagggga ataattttcca
94801 cgggcaaatc caaacgtcgg aaatgctcca gggcacaatg gacaaactta gaagccaccc
94861 gaccatgggg cggtaaatcc accgatcgcc gatagggact ggcctggggc acggccaccg
94921 aaagacgaca gccacaaaaa tttaaatccg ccaactgggc caccgctggt ttctttttccc
94981 gcagaatgtc gtagcccaaca atgcccacat cccgatgggt ggggtccaga atttgaact
95041 catcccaggg cctcaccagt aaagccttag cccgatgggt aatctaggcc aatttgctga aaacgggtcaa
95101 gacgggtttt cggttcgagg aaagcagaaa aatctaggcc aatctaggcc aatctaggcc
95161 tactatcccc caacaacgag cctttcggtg aagcaatggt gagcataaca atttaaggtt
95221 gacccgactg cggggctggg ggcacttgcc aattatcaat aatagcttgc cgtggcctgg
95281 cgatcgccaa agatcctgcg ggcacatccc gattgatcac cgaccccgcc gccaccggtt
95341 ccccttcccc cactgcaact ggggcccaca acacactatt ggacccggtt ttagtgcac
95401 taccaattac ggttgcattc ttgtcaccac cgtcataatt agccgtaatg gtaccggccc
95461 ccacattgac cggctgtccc agcatcgctt cccccaggta acttaaatgg gccacattag
95521 attgggcacc aatgacagat tttttcactt cgacaaaatt gccaatgcga cagttggctt
95581 gaatatccgc ctcccctcga acgtggctat aggtccaag gcgacaaccg tccccaatct
95641 gactttggct aaccacggaa aatagaactg atgcatcaga tccgacaata tccctcga
95701 tcagactacc ggggccaatg cgactacccc gaccaatcac agttttaccc cgcaggtgag
95761 tgttgggttc aatgatcaca tccgcttcta gtactactgt gtcgtcaata gtgatgctat
95821 cgggggtgat caaagtaatg ccctgggcca tccagtcac cttgatgcga ttttgcaaaa
95881 tatcattggc cgccgccaac tgtttgcggt cattgatgcc gttaatttct aaataatcgt
95941 ccacatccac cgccatcacc tggtccaggt agtccactac ttccgttagg taatattcct
96001 tttgatcatt gttggctgat aatttaggca aagcggccgc taatcgaggc cagtgggaagc
96061 aataaatacc gccattgact cgatgggttt cccgttgggc cgcattacaa tcccggctct
96121 cgacaatttg cgtaacccga ttatccccgt tgcaaaatac ccggccgtaa ccttcggat
96181 ctggcacaatg ggctgtgagc aggggtggcg cattgccatg gcgttggtgg gtacgaagca
96241 aattttccaa ggtttctgac cggagcagag gggcatcccc attcaacacc aacaaatccc
96301 cctggtaatc ctggaggcaa ggcagtaact gctgaatagc gtggccagtc ccaactgtt
96361 cctttgtctc aacaaattcc acgtccgac gcccggccaa agaagattcc acggcggcgg
96421 cctggtagcc cacaatcaat atctgtcttt cccggggccag gggacggcaa ctttgtaata
96481 cctttccac caaactgtag ccccccaatt ggtggagcac cttgggtaaa tctgatttca
96541 tgcgggtgcc tttcccgcgc gctaatactg caaccgccac cataatggtt ttctgtcctg
96601 atcgtcgcca ttgagtatat cgtgattggg gcaaggcaaa ttcaggggga aaactaccag
96661 ccagtcaccg ttggcaaaac cttaacaaaa agtttagagt tgcccaagat ctagaaaatt
96721 aagtatttat acggaagtgc aaagaattgt aagtgtgta tgagttcaa ctttggtggc ttttatgagt
96781 ttgtatttgg ggttaggtta tagttgtgta gggtacgaca ttaatatgct caaggatgag
96841 actgcaactt taacaccctt tcttctctcc ggttacgaca agctgtcacc agccattta
96901 gctcgcttgt tagtggagca gggcacagta agtgcgcacc agccattta
96961 cagtatatcc ctgcccggga atgggtctgt gtggaatgtg aattggaaaag gaatgactat
97021 ttactgcccc atcagattgg tgacttgatg tctgtgaaat attgggaaaa tgattaactg
97081 attagttttg gttataactt ttaacttagt tatttcggtt gttctaagtc taacgttccg
97141 gtctattccc agtcctctctg taaattatct aaatccgttt gctcacaaaa actttggagt
97201 tcttgatgct cctgacgacg ggaatgacgg cgatattttt tagtttctaa ttttgggtca
97261 tctgactcct ggccatcact gcccgtttta gttttcaagc ctgtgtccgt tcccctagaa
97321 ttttccgggt tttgctgggc caaaacttcc tccagaaagg ttaggtaatg ttctgacctt
97381 tcccatactt gcccactgc acagtcgggt tctcccgggt gcaaacagtc tttaaaaaaa
97441 cattcctgcc ctgttaactg ttgtcgggct tcgggaaaaa gatgaattag ttgggcccgt
97501 tcaacggcca ggtctgggtg gttgaagcct ggagtatcgg ctagtagccc cccgtgggga
97561 aggtcaaata gttccacatg gcgagtgggt tggcgccctt ttcgcagttt gcccgacaca
97621 tttttgacct gttgttctac ccttggcacc agcaggttga tcagactgga tttgccact
97681 cgggaggggg cggccattaa gctaattcgg ctccttagtt tttcctgtaa tttttccacg
97741 cccagcgat tttccacgct gataatgatc ggtgcgtaac cccagggcgc caggcgatcg
97801 cccagaatt taacatcggt ttcttgcacc aaatcctgtt tattgaagca aaggctaatt
97861 tccagtcctg tggttctctg ttgcacaaa aatcgactta actgccattc ttccagggga
97921 ggatcggtga gggcaaaaac taaacaaatt tggtcggcat tggccaccgg tggccgctcc
97981 aacacagtg ggcggggata aactttggcg atcggcccta gaccccccgc ggccaccatg
98041 ggcactgggt cagtattgct acgacctgac aacaacaaag aaggaggtaa ttccaccggg
98101 acttgatccc ccaccatgac cttttgcccc acttttttca gacgggtacg gcgggtgcag
98161 agtagtggt gagacgtcac attccgtagc cgcacccaat agtagttagc ttgaacggca
98221 ataaccgtac cttcatccgt agctttgggt attgggtaac ccctagtccc ctagggaact
98281 gtcgcccga cggtaatggt taaacaatag gccgattctc cttccagtg cgtaggat
98341 tgctccgtat agccttccaa ttccaagcta tggggtacct gctccactgg ttctccctca
98401 tctagccaga cttccaggca ttgtcctggg gccatctggg ccaatttgag cttagtgcga

98461 acaaaatttaa tgggac agtggccggc agatcagca agattg attatccagg
98511 cccatttatg gattant cccaaaaac ccttatcc agttttgag tgggtttctc
98581 cttttgatagt ggcaattt tccaatagct cccgtctctc cgagttaatc cgggtgggaa
98641 tttgtacctt aaccgtgaa aatggctggc cccgaatggt ggctgtgctt aatttgggca
98701 ccccttttatt ttccagggtt aagacgggtg tgggttgggt gccggcgggg atagtcaatt
98761 ctgctttacc gtccactgng tccacttcca gacgacaacc aaggatggct tggagatagc
98821 tcaactccaa attggaacga atattcatcc ctccccggac aaaatgctta tccgtttcca
98881 ccatcaggaa gacgtacaga tccccctggg gaccaccccg taaaccagca tctccttctt
98941 taccaccccg caaacgggta ccatcatcca ctccggcggg aatggtaatt ttcagctttt
99001 tctgtttctg tttgcccgg accccgttac aggtttcaca tttctgttca atgacttcgc
99061 cgttgcctgt acaggtagga caggcggaaa ctggggcaaa actaccaaag ggggtgcggg
99121 tggcccgaag gacttgtcca gcgccattac aggtgccaca ggttttaacc ccagtgcggg
99181 gcttggcccc agtgccctca cagacctgac aggtatccag gtggggaatg cgaatttctt
99241 tttcggccgc aaaaatagct tcttgaaaag ttaactgtaa atctagccgt agatcatccc
99301 cccctgggtgg accattggct cagcagcagc cccgctgctg gccgcccatg ccaccgccaa
99361 agccacaaaa aatggtttca aaatgtcgg caaaatcgcc catattgccc acatcgaagc
99421 cctgggcacc gccaccgctg acccccgtt caccaaattg atcgtagcgt tgacgaattt
99481 ctgggtccga tagcacttcg taggctcggg taatttcttt gaatttttcc tctgtcctg
99541 gttctttatt aacgtcagga tgatatttcc gggttaaccg acggtaggct cgtttgattt
99601 catctttatc agcatcccg gtccactcca gcgtttggtg ataattccca ggcataatgc
99661 gtcgatgttt tgcttaacaa taattgacaa ggcttctgta gtgtttactg tagcaaaact
99721 tcgccccag atggttgccc agaaatcccc acctccgat ctttaaccaat gtcgttgcgg
99781 actccgttca gaccagccag ggcaatggca atggcatcta cactatcgct gatgggtagg
99841 tcttctagac caaaaaaatt ctgcaccatg gcggccacct cggtttattt ggttttaccg
99901 ttgcccagat ggcatttcca actggattgg tgcaaaaaga cgggctgaat gctcttttcc
99961 cggtaaaata cgaggtttat ccccccaag gcctgcaata cgctccggc cgctttgatt
100021 tgccgactaa aaaaaggcat tccatggcg atcgctggg gggaaaattc ttctagtagg
100081 acgtggatat cctgctcaat ttccaccaat ctttctgggg tgctgagatt tttagatgtt
100141 tcgataatgc catagtccac caagtgaagc gatagatccg gctgaccgtc gagaatagcc
100201 caaccaataa tggctaaacc ggggtcaatg cccaaccagc gttgggcgcg ttcagtttga
100261 tccattaggt taattatttt gatctagttc agctaaaatt tccacggctt gccacacaa
100321 agctccatgg tgggaaccat tgcctagccg gataccggcc cattgccgca cgtcggcccg
100381 gttatacaac acaggggtct ggtcaaaaata ggtaaactct cccccgctt cgggtgagaat
100441 caactccggg gccgcaaaag cccaatcctt agcggcggat ttaccggaga gggaaaatgta
100501 cacatcgctc tgcctctcca aaatcgtgac gattttacag cccacactgc ccacataatg
100561 gcgatcgcca aagggtaaac ggtcaatcaa atcttgaaa cggttggtcc gatgctacg
100621 gctcaactact aggggttaaag attctaattc agttttaggc ttacacttca ctgggggttat
100681 tgccccgggt ttgggtttct gaaaacagcc ctgacctgg atggcatagt aaagcttttg
100741 ggcttccggc atgcccacta gggccaacac cgcccgctgg cgataggtea aagcaatatg
100801 cagggcataat tccccggtct tatcaatgaa gtccctgggt gccctgggtg ggtcaataat
100861 ccaaacccaa tcttggggta atggttcgtt gcccctgggt gtttcttcgc ttagatagcc
100921 aaattcttcc ggggttaaagg tagcttgcaa agtagccaaa atatatgat tggccgcaa
100981 atccgcgcgt gttacggggc catcctgttt atcttctgtg gcatttaaat tgggtctgatt
101041 ctggccactg tagtaggact gaagaatttc cattgcgccc cagccggcgg tgcggagagt
101101 agtcaagcgg gaattctagg tgggtaaaag ctgcgttatg accataggaa taaatgcagt
101161 ggcatcgaaa attaaagggg cgattctaat tcaaccactc cagggtttg gctgggttaag
101221 attgtgttta ggcattggag ccaaatgcct aagtcctatt ggtcatggc agtaatatcg
101281 ctcaaaatcc caacagagta aagcgcacca aatggtagcc cagacaaaag caaacaaga
101341 caatcagggc tgtcaagctg gtgagtacaa tgcgcaaaag tactttttcg taatcactcc
101401 atagtggtatt cacggggaaa ttttttact tttgaacaat ccattcagac tagttagagt
101461 ggctggccgg agggagcttg gcaacaaaat taacgatcc atctactat ttaaaatttg
101521 aatgagctaa tttcacctct tagccgcaaa aatatccctt gcattgaccg tcaatttatg
101581 gaaattcgcc gccggcctcc taaccccccc atcaaagtgg acattcttca gtatcaaat
101641 aagcatccag aagcggctcc ccgtcacatt ctggaggaaa ttgtttggca taaggaaaag
101701 gaagtggccc aacggcgaga attagtcccc ctgggtcaaac tccaaagttt agtcaaggac
101761 atgactcccc cattggattt tgtgggggca ttgcgccaga gtccccggca accggcctta
101821 attgctgaag tgaaaaaggc ttccccctagt aagggcatta ttccggcgga ttttgaccca
101881 gtggcgatcg ccaaggccta tgaagcggga ggggtcaact gtttatcggt gttgacggac
101941 gagaaatttt tccagggtag ttttgaatat ttgcaactgg tacgctcagc ggtgcaatta
102001 ccttgcgtgt gcaaggaatt tattattttac cctatcaaaa tctatctagc ccggagtccg
102061 ggccgcgatg cgggtgctgt aattgcgcgt atctcagcg ataaggattt gcgttatctc
102121 ctcaaaaatta ttgaaggttt gggcatggcg gcgttgggtg aagtcctaac cctggaggaa
102181 atggaccggg ttttggcttt ggacgggggt caactaatcg gagttaataa ccgtaatttg
102241 caaaccttca ccgttgatct gcaaaccaca gaggatcttt ttgcccacg acgggagcaa
102301 ttaaccceaag gggacattac tttagttagc gaatccggca tttatgaatt ggtgatttg
102361 caaagattac agcaggctgg gggccggggc gttttagtgc gcgaatccct ggtcaaacaa
102421 ccagatcccc aacaggcgat cgccgcttta tacggtgaag ttttaattggc gcagtacaa
102481 ctcaactatg gggataaatc caccgatccg ccattgccat ggtgctgttt ttgctgttgg
102541 agtaccaatt gttgtttgac agcaattaat tcttggctcc gttgctggag catttccgcc
102601 atttgttgaa tagttctcgc taaggccccc agttcatcgg cccgattggg cacttccctc
102661 aaacccaact ggtcggcttt aaaactgtta ttttcaatgg cggcggcgat cgccgctgtg

102721 acgcaataaaa ttggggttag atcctccacc ccacgggtgg ggggggtttt aaaggcattc
102731 atcacttggg ttagcgagac ggcaatcgcc ccaacttggg taaaaggggt aaagggtacc
102841 cgcaaaactta aatcatgggt ttgggtctgg cgggtccatca cctgaaaaag tccataaggt
102901 tctgtgggtgg cttgatgttc cgacacatta agcccaattt cctcatcttc gggggaaatc
102961 cgcaaggcaa acaccgatt tagcaacgtt aaaaataccc aagccaaccc aaaggccccc
103021 agcgtacaaa ctccaatacc cagcagttgt acccgcatt gttgccaacg atttagcccc
103081 gtatccacca acggcaattg accgaataat ccacacaga gagtgcacca gactcttgcc
103141 ccaccatgga ctgccaccgc atccaccgca tcatctaccc cccagtgcac cgtttttttt
103201 cccaccagat aggcgatcgc cgaccocgta gctccaatca ccatggcgat cgggtgcata
103261 accacattgg cgctggcagt aatggccacc aaacccggcca gggaaccatt catcaggggt
103321 tccacttggg tcatcttggc ctgtaggagg ctaatcaacc ccgccatcaa catgcccccc
103381 accccggcta ggacagtgtt gaccataatg cccggcacct cgggtgtcaa gccaaaggta
103441 ctgccaccat tgaagcccaa ccaaccaaac cagagaatca aagtgcctag aacggaaaaa
103501 ggcattattg aaccctgaat ttttaagggt ttaccggttt tgggaaaaag acctggcgg
103561 gggccaacaa cgagaatagt ggctaaacgg atccaagccc cgacgctatg caccaccgtt
103621 gacccgcaa aatcccgaaa gcccaaatat tctaaccagc cccctgtagt ttctatgcct
103681 gccactgttg ctaagccatt ccaagcccaa tctccaaaga ggggataaat gagcccagaa
103741 gctagccccg ccaccaataa gtaggcagaa aactttaacc gttccgcgcg cgctccggaa
103801 ataattgtag tagcgggtgac gcagaacata gctgaaaca ggaaaaacac cgttaggggt
103861 ggtttctccc ctacgtcaac aaagctataa cctgtgcccc accagcctcc ctgggacagt
103921 ccaaacataa tgctgaagcc aaaggaccaa aaaagagcca cagaaatgcc aaagtcagca
103981 aaatttttaa tggcaacgtt aatgctgttt ttagaacggg ttagccccga ctccaaacac
104041 ataaaaaccg cttgcataaa aaataactaa ccagcacaga gcaacagcca gagtgtatcg
104101 atggagggtc tgggggttag gcggcctctt gccaacgggc tttgagttgt ttgcgcttga
104161 actgggtactg ttcagcaaaag cggggaattt ccgagcggtg accaatgaca tccgtctggc
104221 cgttctcggt caagatttgc gaagggtggg gatggagaat agtactgcca tccgtctggc
104281 gtatgggcaa gacaataaag gctcccttac tgcgaacttc catttccata atggtgcgac
104341 ccatggcggg ggaatccggt gccacaatta gttcatccat ttgtacttcc acgctggcca
104401 acagggtcatt taaaaaaccc cgttcacggt ggcgattgag aaaatcccgc cgtttcgatt
104461 ggggtgattaa atccgccatc tgaactgccc ccaccgtcag gggtaaaatc acctgatccg
104521 ctcttgcaag cctgagtttt ctctctgttt cgggaatttc tccccgggcc tcccggtgta
104581 agcgggaggt gagttccctc gcagtcaggg taataaagac attggtggca tcttccggca
104641 aaaccgtggc caaggctctt gccctcatta cccccaacat ttgcaattgt tcttccctgg
104701 tggcatcccc gcaatgggac agataacctt attcttcggc gatcgccact tggctgggtt
104761 gattatcaat gatgctaaag ggcaagccag actgttttaa ttgcttggcc aaaacctgac
104821 ccatgcgggc aaaaccgcaa ataattgtgt ggtccgttaa attagcaatt tgcgttgc
104881 gttgctgatt acccaaagcc cgatggattt ctccctccgt caccatttgc acaaagtctc
104941 cgacaatata aaccgctgag gtgtgccccg ctagaattac ccccatagta aaaactcttt
105001 ccgccgtggg ggtaagaggc cgcacttccc catagcccac cccaaaaacg gtaatgacta
105061 ccatgtacac cgcttccgtc gttgtccaac caaagcagat atagcccaaa gtggccaaca
105121 ccaaggtaac aacgaaaaac agtaccacca gcttgagccg ttgattggaa tctgcatag
105181 ttaaacggac taaacggcga tcggcaaaag ccaagaatgg aaaaacaccg tccgtatagg
105241 cagtttatca accctaattt agaaaaattg tctcggcgcc aatttagccc caattcgcca
105301 actccagaca aaattatgaa aaaatgcaaa tctcggcgcc aatttagccc tactttcaat
105361 tactaactat cttcacatta aactcacgaa ctacgcctgt attcatttga tatggcagtt
105421 ttgggttatg gcaattccaa ccagtccttg attactgaaa aacaatgggg tgaacctaa
105481 cagattccgg ttttaggtaag gaagaaggat ggagcaataa ttctgctgtg gagegttttt
105541 ccaccatttc cctagtgtac aagcagtggt ttaaatcttc ccgggaaggc aactcataca
105601 tcacattccg cattaatccg tccacaattg cccgtaacgc cctagctccg gttttacgac
105661 ggtgggcctc cgtggcgatc gcccgcaccg catcgggttg aaaatccaac tccacatggt
105721 ccatacccaa taggggttga tactgtttta caatggcatt gcggggctgg gtcagaatag
105781 caattaaagc atcctcatcc aaggggttaa ggcaggccat cacgggaata cgaccaataa
105841 attcgggaat cagaccaaat ttgactaagt catcgggctc tgccgtgacg agcacatcgg
105901 cagttctttt ttcttactt ggccctctc cccggcgcac aaagcccatg gattttttgc
105961 caaacctttg ttcgattacc ttttctaagc cgacaaaagc accaccacag atgaagagaa
106021 tattactggg atcaatttga atacagtctt ggtaaggatg ttttctgcct ccctgggggg
106081 gcacattggc caccgttcc tccaacattt ttaacaaagc ctgctgtact ccttccccgg
106141 acacatctct agtaattgaa ggattctcac ttttgcgggc aattttatca atttcatcaa
106201 tgtaataaat gctctgctgg gctttctcca catccaaatc cgctacctgg agcagttcca
106261 tccacatatt tccacatct tccccaccgt agcccgtctc cgtcagggtg gtggcatcgg
106321 ccacagcgaa gggcaactct aaaattttcg ccagggtttg ggcaagtagg gttttccag
106381 acccgtggg gccactaga agaataattc atttttgtaa ttccactgca tcgcccggat
106441 caatctcttg attgcgctcc agcagggtta atcttttgtg gtggttataa acagcgacgg
106501 aaagcacctt tttagcctca tcttgcccaa ttacatattc atccaggtac tggtttattg
106561 ccgttggttt gggtaattct tctagggtta gacggcgacg ggggtgacca gatttttttt
106621 gtttttgacc tgtcccatcc ctttccccgg ttgaggcagg ggggtacatc aacaactcct
106681 catccaaaat gtcgttacag agttctacac attcatcaca aatgtacacg ccaggggcag
106741 caattaattt acggacttgc tctggggttg tgccacaaaa agaacatttc agatggggag
106801 cgtatttggg cataaaacta accgagggag gtgacggggg tagtgggggt ggggaagatta
106861 gggcgggaaa ttacctggtc aatgaggcca tactctcttg cttctccgcg agacataaag
106921 aaatctcttt ccgtatcttc ctggagtttt tccatgggtt ggccgggtgtg ttccaccaac

106881 atggtattga ggggacat gatgtacagg atttccctgg cctgaa aatttccacc
107011 gtttgacctt ggggtccccc gaggggtcgg tgaatcatga tgnagaaact agggcaagcc
107101 atacgttttc ccttacagcc accggaaaag aaaaaagccc ccatgctggc agccagacc
107161 aaacagatgg tgaccacatc gggagcaatc tgttgcatgg tgcatagat ggcagggc
107221 gctataaacgg agccccccgg ggagctgagt gaatctgcc cttgggtcgt cacaggggtg
107231 gegtccaaaa atagttagct gggccacaatg gaatctgcc cttgggtcgt cacaggggtg
107341 cccaaaaaga tgattctttc ccttagcaga cgggagtaaa tgtcgaaggc tcgctcgccc
107401 atggccagact gtccaccac catgggaaca acgctttgga tgttattgcc cctagggtg
107461 cggaggggag aacggtaggg agaacgggag ttgaccatgg gttaggtagg gggaaaggta
107511 gggaaaatta agaaaaaggc ggacagggat caagcggcg tccaaggagt ggggaaaaaa
107531 aatttttctt ttactttgct ttaggtttaac tcaactttgt tgcgcacatg gtctcatctt
107641 acctagattt acttgagcct tgggggacta acgcccctagg acagggaggg caggagggtta
107701 atctgcccctg tcaatttacc tattccggag atttctcctc tagtttgagg agggccgggt
107761 tgccctctgac accccaaggg taattttggg caacgggtta ctcttcgctg gagggtgctt
107821 ccacatccac gatggcttct tcctctgcat cgtcgtcggg agtatcttcc tcaagtctgg
107881 tgaggctacc ctccggcaac agttcaacgt cagcccatte tttgagcaga tccagcactt
107941 tactttctgt gagggaaact tccacaaggt tcaccagccg ggattcgtcg attttttctc
108001 ccttgaaatc ctgacgaagc tcgtcacagc gtctcttaac ttctgcttcg gtgggctgaa
108061 ttttttcttc tttggcaatg gctcctatca tcaggtcggg ttttaagggtt gcgatcgcc
108121 ctgggaggga attgtccttg aggggtttgga gcatatcctc cccctgacgg aacagttggg
108181 aaacatctag tcccctgctt tctagttcca tggcgggttg ggcactagg cgtcgcact
108241 cctggtttgat catggtttcc ggtaaatccc cggggaacag tcccccaat tttttcttaa
108301 tggcagcctt gatgttgctc tctgtgctgt gtttgccctg ttcttggaat tgtttctcca
108361 gatccgctt gagctctgcc atggttccaa actcgtcac atctcggcg aagtcacgt
108421 ccaattcagg cagttcccgg aatttcaatt ctttgagctt aatttcaaac aacacatctt
108481 ccccgccac agcttccaag ggatagtcct ccggaaaagt aaccggaatc agtttgggtt
108541 catcaaccgc cattccgaca ataccgtcca caataccagc cacaacacga cgtcttcta
108601 gggtcacctc aaaatcagac ccttccactt cggcgatcgc ctctccagct tgaccatctt
108661 ctggccactg aaaagcggcg tagtccacaa tggccagatc tcccagggcc gcaggacgg
108721 cctccaccgg gacaagggtg gcccggtttt cctgttctcc cttgagccac tggtaacgg
108781 catcggcact gtattcgatt tcttccgctt gggcagtgat ttttttatag ctctccgggt
108841 catattccgc ttccgggaac acatccgctg ccaccttaat ggtgaggggt gttcagggt
108901 caaagatttg aatcaggttt tccattgtcc agcgcaggga aaaattgcca atgatgggt
108961 gtttttcttg ctttaaccgg gcttttaagc tgtcgtcgat caactcttca atggcgtgg
109021 ccttgatata gcttcgctcc aaacgcggga taacaatggc ccggggcacc tcccccgac
109081 ggaacccagg aatattaacg gtgcgggtta actttttgac gacgtttctc taaactttct
109141 tcgacgctgt ggcgggaatc tcaattttct gcccaacttg actatctggc aatttttctt
109201 gggttaacttt cattgatggg aaatctcgat ggtgaaacaa tgggggcagt gggcactaag
109261 ttcacccctg gagggctggg aaggactgca gaaatcggtc tgtgggacct tctaccctg
109321 ttatgctagg ttcaacttag ccgagggaat tgtttccctt ctagccccgc aacgcaatgg
109381 ctccgggaag acctgtggcg gtcaacccaa ttgatcataa tataagccgg gtgccatttt
109441 ttcctagggc gagaatcttt tcccgcgggg ggggtccccc ggccgggttg agagaatggg
109501 actaaatcaa tgatttttct agctggacaa ttcaataatg gctttgcggt tttaggggca
109561 atgcccctcg tcacaattag ttttttcttt ttggctgat tttttacccc aactaacttg
109621 accaactggg ctttaactaag cttgatctgt cttctgact gcgttgccca tcttctgact
109681 ccgattagct actggaggag taagctttgc catcaccgat acgcgttgcc atcctggggg
109741 ccaactggggc cgttggcaca gaattactgg agttactggc cagccggaat tttccctgg
109801 cagaattaaa acttttggcc tcgccccgtt ctgcgggtta aacctggag ttccaaggag
109861 aaaagttacc gatccaggca gtggatgggt cagcgtttta aggtgtgac ttgggtgtgg
109921 cttccgcccgg tggttccact tccaaagcgt tggtgccgga agttaccaaa gccggagcgg
109981 tgatgggtga caattccagc gcttttcgca aggtcatcat agtgccccta gttgtaccg
110041 aaattaatcc cgaagcggcc caaaaccacc aaggcatcat tgccaacccc aactgcacga
110101 cgattttaat gggggtagcc atctatcccc tgcatacagt ccaacctatt aaacgcattg
110161 tgggtggccac ctaccagtct gccagtgggg ccggggccat ggccatggaa ccagtgaagc
110221 accaaagccg ggacatcctg gagggaaaaa tcccccaagc tgagattttg caatatactt
110281 tggcttttaa cctctttccc cacaactccc ccatcacagc taaccactac tgtgaggagg
110341 aaatgaaaat ggtgcaggaa acccggaata tctttgccgc agaagatata cgcatacgg
110401 ccacctgtgt gcgggtacct gtgctccggg cccactcaga agcggtaaac ttggaatttg
110461 ccacccatt cccggtggaa ttggccaaaa cggcgatcgc caaagctcgg ggggtaaaac
110521 tgggtggagg ttggcaaaaa aattatttcc ccatgcccac ggatgccaca ggcaggagc
110581 acgtgttggg aggcagttat cgccaagata tttcccaccc caatgggttg gacctgtgt
110641 tgtgcgggtg tcaaatctgt taaagggcag cctcaatgc ggtgcaaatc gccgaattat
110701 tgggtggagg ggggtggctg tagaattttt cccaacccat ccatgggttac ttggccgctg
110761 cctttttctg ttgagatagt ctatggctga ttttgtaagc acttccccct ttggccctgt
110821 gtttaactgc atggttacc cttcaatgc cgatgggtgg gtggattatg gggtagcgga
110881 aaaattggct gaccatctca tccccctagg cagtgaaggc ctgggtgtct cgggaccac
110941 gggggaatct cccacccttt cctggaggga ggagcatgag ctatttcggg tgggttaaca
111001 aaccgtcggc gatcgggggt cegtcatgtc cggcactggg tctaactgta cccggaggc
111061 catggaagca acccagattg cggccaagtt gggagtggtt ggttcccccc aggtagtgc
111121 ctactataac aagcctcccc aggaaggttt attggcccat ttccaggcga tcgccaattg
111181 tgcgcgggag ttgcccctga tgtgtacaa cattcccggc agaacgggac agagcctagc

111241 ccgggaaacg gtttactgtt tgggggaagt gggaaacatt gttggcattca aagaagccac
111301 cggcagtttg gaggcagggtt ccttaatttc gggccatata cccgagagat tggccatcta
111361 tggccggggat gatgtgcccga cctctccttt attggccgtg ggaggsgccg ggggtggtcag
111421 tgtgtgccagt catctgggtcg cctctccttt gcagggccatg gtgcagcatt ttgcccaggg
111481 agcaaacggcc caagccctcg aaatccattt acagctaata cccctattta aaattctttt
111541 ctgcgccacc aatcccatcc cagtcaaac agccctggga cccaggggtt ggcccgtagg
111601 atcgttcaga cctccctttt gtgctctgtc ccttggccac accgaacagt tacgagacgt
111661 actaagggat ttagccttac ttccttaggg taaagaactt ggggataaat attcgattaa
111721 cccaaggaag atagaccgaa tcaattggga aacttgacct tggcgatacc agtcaaagaa
111781 tggcagtcac aagctgaaat gatctttgat caaatttaac caattaccat caactccatg
111841 gctaaatccc tggccagtgt cgtatgtttc tcaatttttt tctcagaata ggtacctatc
111901 cggaatgtat atgctagaat ggcattgaact taagagcgaa gtaagttttt cgattccgtc
111961 caaacctgaa tagataatcc atcccatatg cgagctagtt cattacaccg attagctaaa
112021 ggcttcagcg tcttcttttc attttcgata ctttccgagc ccagaatgag ctaaaattttt
112081 tctgaatcag tcttctgttt tacttcttgg cattaggggt tggcctctcc ccaccggctc
112141 caaagattgc aaatacattc actccttggg atgttctcaa aactcggttc tatccgtttc
112201 tataaattcc ccaaaaaaaa gtggaatgct aatccaaaga ttgaattgaa tgggtcggtt
112261 gctgattgct tagccccgtt tttgctctgc ccggacctca gtttgttctt caattttctt
112321 aagttgcact gcgactgttg attcttaact agctaaatta caacgttttt ttattttacac
112381 tatggctaaa aataactcaa cccaagccct tctttgaata tgacgatgaa attttactgc
112441 aattggtaaa aataactgcg tctttgaata cggttaatgtt gtactgccgg acatgacctt
112501 gctagctttc cccaccgacg acatgcacgg catgttggtt acccacggcc acgaagacca
112561 cctgagggaa aaccgggaga aaatcaaggg gtttgacatt cccattatct accgcccctg
112621 cattggtggc attgcctatc acctcaagca ggtatggttg ggtatggttg agcgaccaa
112681 gtttagccatg gccctgttac gggacaagct ggaggaagcc aaatcctttg tgggtggaatt
112741 tttgcagacg gtctctcccc gggaaatggt cgttttgggc ctattgtcta gctattcaca
112801 tattcgtaac acccactcca tgcgcgacag ctattgtcta gctattcaca cactctggg
112861 ggtagtgtatg cacagtggag attttaaaat cgaccacact cccattgacg ggggaattttt
112921 cgacctgcaa aaggtggcgg agtatggcga aaaaggggtg ctctgtttac tgagtactc
112981 caccatgctg gaagtgcctg gcattacccc ctctgaagcg tctgttatcc ccaacctgga
113041 cggggttttt tcccaggcgg aaggccgttt gatggtgacc acctttgctt cttcggtgca
113101 cggggtcaat atcatcctca gcttggccca aaaacatcag cggaaagtag cgggtggtggg
113161 ggcataatg ctcaatgtta ttgcccattg ccgtaaatg ggctacatca aatgccccga
113221 taacttattc gtgccccctca aagcagcccc caatttgccc gaccaacaac aactaatttt
113281 gacctggtg tcccaggag aacctctggc ggccatgacc cgcatttcca acggtgagca
113341 tccccagatt aaaattcgcc agggggatag agtgggtctt tccgctaact ccccccgg
113401 taataccatt gcggtggtca acacatttga tggccatgct tcccagggaag aacacaaaat
113461 ttacggcaag catcagggca tccacgtttc tgtccccgtc catggggaac accgtatgtt
113521 gttggtggcc cttactcgac cttaaattctt tgtccccgtc agcgaaaata ttgttattgt
113581 ggtcaagcat tcccagatgg cccaggccca ggggtattccc agcgaaaata ttgttattgt
113641 caataacggc gatgtaattg aactgaccgg cgtatgcac cgggtggcag gacaagttcc
113701 ttccggcatt gaattggtgg atcaagcggg tattgtccat gagagcacca tggctgaacg
113761 gcaacaaatg gccgaagacg gtttggtagc ggttggcggc gccctaagta aaactggcac
113821 actgttagcc tatcctgagg ggttggtagc ggttggtagc atgaccattc agcctaagtt
113881 gttggaagaa ctaattgtcc gcaccatcga gaatttcttc acagaacgct ggtcagagtt
113941 caccatggtt tccaacggct ccacagaggt tagctggaat gcgctgcaaa aagaattgga
114001 gtctagcttg caacgcctga tcaaacggga attacagagt agccccatgg ttttactgat
114061 gttgcaaacc gacaccccca tcgaattgga tcagggtccc cagaaatgtaa gcaactgtcag
114121 tgcgacttct gctacaccag gctcccgcaa aaaagtggc ctgactaaaa cccagaacc
114181 aaaagtgaag gctaaaccag aaaagaaagt ggtcaccact gccgagccta gcgccaacc
114241 ggtcagtacc actaaggttt accgtcgtag ccgcaaacgc tctaccactt ctgtttcttc
114301 ctaagatccg gtattgtttt ggttgggggt ctatctattg ggccccggcc aatttctttg
114361 tcagtccggt aattgtttgag caaaattaat gtccactgta attcctacct cccaagaacc
114421 tgtcaccctt cccaatgaaa ttctagaaat ttccatcagc attgcagtca aggagttaga
114481 cccaacccta gtcaatgaac agtttttgaa gttcagtggc attgtgtcca acgaatggga
114541 attgaaccaa cagccagtgg taagtaaagc tgggtcccaa ttgggtgtta aaaaatgggt
114601 cagcattgtg gccagcccc gctccctaac gtttttagaa gggatgaatg ataaaaaggc
114661 ggaagtggta accgtgggca aggtcgccag tgcctttgtg gaaaaattac ccaattgcca
114721 atacaacggc gtggtagtaa cccccaaatg tttaattccc ctaccggatc aaaacgatgg
114781 ggtcgggaag ttcacaccg gtactttgct ggcacccggt gcctggcaag atttgggcaa
114841 ggcccccgta caagcggcgg tggaaattcac ctatcttttg gaaggctgtc aatttaacct
114901 caaagttaac caggcaactt tgcagattcc cgatcgccag gcagtgaagt cgttgttatt
114961 tgcgggtaac ttcaattaca gcttgaataa tcccaatccc caggaaacgg ctacggtggc
115021 caaacagtag attgaagcgt ggcaatccga cttggatact ttccggggca ttgtccacga
115081 aaaaattctt gcggagcaac aaccccaaac ggtgtttggt taattcggtg taactatttg
115141 ggggttttaac acctctaaca tggagcaatc aatccgtaga aatttccgtt gaccatactt
115201 tatccatgga caccaagccc cctcgacaac gattgattgg tttgaccggg ggcatttgta
115261 cgggaaaaaag tacggttacg gattatttac agcaaaaaata cagcgtccct atcctcgacg
115321 ccgacctcta tgcgcgcaa gcagtggaa cgggttctga aattctagtg gcgactcgca
115381 ggcgttatgg cccggaaatt tttagaccaac agggacagtt aaagcgccaa gccctggggg
115441 aaattgtctt taataatgct gaagaaaaac aatggctgga gtcccaaat caccctttg

115601 ttggggggttg ttttctgg ggccttagctc attttaaaca agagcaatg gtgttattga
115611 gtttctctct attgtttgaa ggccttagctc atgattgggt aacggaaatt tgggtattga
115621 cctggcgacc acagcaacag gtggaacgat tgatcaagcg caacgggttg accgagggag
115681 aggtcttagc tgcattact agtcaaatgc ccttggcgga aaaggttagt ctgacggatg
115741 tgggtgttga caactccggg acctagaacc acaaattatc aaggtctggc
115801 atcaccggtt acatttcctt gcaactgatac ttccatcagg cgatcgccag ggtagaaact
115861 ggactaagat taagtccgc agaaacaaat cgagctctat gccgtcagtg ggcataaact
115921 gccagaattt taacttttca gttgtacca tatttagtgt ttgtccctta caatgagact
115981 ccccgccacac tagatatgga gttgtgtcc ggcaagaccg atggcaaaat gaatcaactg
116041 caagaatggc ggcaaaagtg tttagacgac caactaaccg gctcaatgt cactccctt
116101 ttagggggatg ccccgcccca acatttgctt tatgtgaaag cgtccagcg ccgtaatgac
116161 ggccgagttg gtgacgggtt aatgaaacgt tatgccacg tggcctcggg gggctgggtg
116221 tgttctggca ttgatttact gtccggggaa aaagatctat ggggggtgtt taagcccgat
116281 cggccgagac aggatgggga aagcagtaag accattaaat atgagcatcc tcccaaaaca
116341 cccacgggaa tttttgacct gcggtgtccc ctccatctt agcggaaggat tgcgtctaaa
116401 gctggggtag tcttgacaga ggaggatcaa gaccagacc agccggattt aggttttgg
116461 caatggttga tgggccatcc tggaaattct ctggtaatca cagaaggggc aaaaaaggcg
116521 ggtgctttac tcacggccgg ttacggggcg atcgcttac caggagtcca taacggttac
116581 cgcactccta gggatgacca ggggcaacgg atcgcaaat gccaatat tcccgtttg
116641 ggaaaattag ccgctcccg cagacaaatt ctgattgctt tcatcaaga cagtcaacc
116701 aaaactatcc agcaggtgaa tctggccatt caacggttgg gctatttgtt catcgccaa
116761 ggggtgtgaag tcaaagtttt gcaatgggag catcaccttg gtaaggcggt tgatgatgtg
116821 attgccacc aaggcagtg tttatctaca cagttggtcg gcaaggccct gccgctggaa
116881 atctggaaag cccaacgact taaccgctc acccatagcc gggggatgga agtggaaagg
116941 cggatatttac ctcttttaac cattcccgct gaagaaaaat taattgccct acaatcgcca
117001 aagggcacgg gcaaaacgga atttctcgct cgcattgtcc gccaaagcca gcccgaacac
117061 agaccagtggt tggtcattgg ccatcgact cgtttagtgc aggaactgtg ccaccgttt
117121 cagttgacct atgtggggga tttatctagt tccccctag ctgcccagg gggttttggg
117181 ctgtgtatcg actccctcca tggccattcc caagcccagt ttgaccggga acagtggcaa
117241 gattgcttaa ttatcattga tgaagtggag caggtgctct ggcatggact gaattccgat
117301 acctgcccgc gtcacgggtt ggccattctc cgtaacctca agcaactttt gcaacatagc
117361 ctagggggag aaggacaaat ttatgtggcc gatcggtatt taaccgatgt tccccgat
117421 ttttgatcac gcttgagtgg cttccctcct cactttggcg aaatgacct caagcaatg
117481 cggggttag aagaagcatg cttcggggag ggcggtaaac ctttcgtctg tctctcagct
117541 gtcaaaacaac tgttgcatca cttcggggag ggcggtaaac ctttcgtctg tctctcagct
117601 caaaagctca ccagtgcctg gggcaccgcg aatctggaag cctacctgaa aaagcagtt
117661 cccgatcgcc gcattttacg cattgatgcc gaatccctat ccgatcctca ccatctgccc
117721 catggcagtt tgaccaacct caaccaagt ttggccgact atgacattgt gctgagtgt
117781 cgggcccgtg aaacgggggt cagcattgac ttaaaaaatc atttcacttc cgtgtggggc
117841 attgccagc gcattccaaac cgcacttcc gtttgccaat cctcagccg cattcgccaa
117901 aatatccccc gttacctctg ggccgctagc tatggcttta accaagtggg caatggagct
117961 acggccatta gtaagtccct caccgcccgc catcgtttga cggaggttaa tatccggctg
118021 ttgcaacaat cggatctgga taatttggat gatttagaca ccggtttcca ggcgggaatc
118081 ttgctctgct gggccaaaat ggcggtgccc atcaacctgg ccatgggtcaa ttatcgggaa
118141 tccattcttg ggtttttgca ccaggtaagg catcagttgt tggggccgccc ccagactta
118201 ccgtctttgc ctgttccacc cagcgatccc gatccccccc tcagtacggg cgtctccag
118261 cctttgcaac aggccattga agcggtgccc gaacaaaatt accttgccga ctgccaggcg
118321 atcgccgacg ctaaacccct aaaagaattg gaatatcaac agttgaagaa aaggctagt
118381 aaaaatagcc acgaacggca acggctacgg cgtacgaac tggcccaacg atcggtatt
118441 cctgtgacgg cggatctggt gcaaaaagat cttggcgatc gggatgcca aattgcccg
118501 cactacttcc tcaccgtagg cggccattc ttttcccggt actttaatgg ttcccaattg
118561 ttactatttg atcaaggaca aggcagcttc cgcattccca ttctgctggc ccatcccaa
118621 ggggccatca tcggtacctg tgaggactta atcgccctgg gtaaatagc ctggctaac
118681 cgggagttgt gtgccctgga agtgggcatt ggttttagcca aaaatgctag cccatcacc
118741 cgggatgata ttaaaacggg tttttctgga aaagctgggc ttgggatcc aattaaccg tacgaaaact
118801 attgtccgtc gttttctgga gatttatcaa atcacctgtc ccaggatgg acgagaaaag
118861 gtagaaaaaa aacgagtgcg aggcgatcgc caatgtccc gcatgtcgg acaatggatg
118921 gtctttcaag cttggctcca acagagttcc cccagggcag aggagcaaca tcaaccttt
118981 gcggaatatt ggaaaaagt gcctggagtt aggaataact cgacaagaat ggctaagcct agggcaaca
119041 gtgcaactca gcctggagtt cgcctgggag aggagcagc agttaggccg ttataggcca tcagttgtcc
119101 tgccttggcc cgatcgccaa gggcctgggc ctcctggggc accccaatca acgcatcgcc
119161 agcgtggcg gtatgttccc ctcgtttcca agcaaataga tccctggggc aagcaactac
119221 gagtgaact ggttccaaca tggctccact gccaccggtc accccaatca acgcatcgcc
119281 accaaacagt tcggtaaatt cagcatcgct caaaaagcca ctgtccgctt cggacaactc
119341 ctgccattgc acatcatggg gacggtacaa ggcgcttcc aacacgggaa ttagagtcac
119401 taccataaa ccttcaactt ccaattgact agagccagtg ctgttgtgga gtaggatgcc
119461 atcgccaatt actgcaaaaa caatggtttt agagccagtg ctgttgtgga gtaggatgcc
119521 gcctttggct aaacctgac gattttgtct caacgtagt cggatgggca aaggagact
119581 actggcggtg atgggaatgc ctttgttgc ggtggttaac gccagtcac agcaaacctg
119641 aataccgttg gcatcacagg ggaaaagggg aaaaatattc ccattccgca tcatagcgcc
119701 aaaataattc tcaatttccg gccgttgggt agtccaaccg ttgcccctt gttccaacgc

119761 tccccgctgta aacaggggcaa tggtaggaagg ggtagggaaga agtagctcgg ccacggcctg
119821 gggtaccgctc tgccaaatgy gtaaacgggtt aatagcaaaag gactcgtagg aacaccagag
119881 gggtaccgctc ccaaaacaaag cttggggcggo ggccaggcca gcaacaggcat ctcgctcag
119941 ggggttcataa acttggccgt tgggtcgttg gaaataatcc tcatccaccg tgggatggac
120001 aatttttttagc ccaacgttga tgttatcgat cccagaagcg gcgttacctg cggcgttggt
120061 aaccacaaag tttgaatcct gtttgccccc atgaaccacc aattccccc aaggcgttggt
120121 ggctacctgt ttatcttcta gggcaaaact cttcaggggc agagtaccca gatccgctaa
120181 aggtaaaaacg gattccgtca ccacggtttg ggaggcgggg ccaccgtggg aacgttcaaa
120241 attgggtccg aaccaattgoc aagcttcggg ggataggggc cgttcttgca aagcactgac
120301 aatataatct ttatctaaac tgtcgccggg atagagggtg tgggatttg ccccggttt
120361 gtggactccc gctcctttta gttgtttgac aatcagaacc gttaacgtac caccaagggc
120421 cgcttggggc gctttgtcgg tggcctccaa cactgcctgg gtaaaagcta accgttggtg
120481 gaaagaaaaac ttgggtgctg caacaaaatc ccccgcttga ttgctgtcgt caaaatcttt
120541 ggctgttgacc agaattgacat ttttaaaacc gttgccttgc cagtagttaa ccatggcttc
120601 attgctctgg gtggaaaacca tgcgtgtggt ttcttggtta aaaccgttcc agacaaaaat
120661 gggcaaaaaag tttgttacct ggggataggc cgtgtggaaa tggccaaaac tactcatgat
120721 gtagggttcc cccaaaccac catctccgat agttacggga aataaaacgc cgggataaag
120781 ttttgctcgg gccatggcga aatggttgacc ttgaccagg gggcctgctg gggtaataa
120841 gcctgggatt tgccctgaga ggtggcccaa taggcctgct atttcccgga accgatcgcc
120901 aagttcttgg acattattaa tccccatggc ttccaggga cgatccaaaa acatgggtg
120961 gtaaaaaacg ggggcattgg ggcccacttc cgtcaccgta tttttgtagc ccaacatgac
121021 cagagcggcg atcgctccg caatgctggc aaaaccgccc gggtagcccg attctttact
121081 ggctgtgggt tggagcgtta aatatctgag ggcattccgc gccaaacaaag tttgatcac
121141 cgcttgggga tcattggcag aactgatggc ctttgcccca ctggcgatcg cgtttctctg
121201 gccataacga tcaaaatccg gcagggtttt accgaaaaag cgaattcctt ggcaaaaagc
121261 aggggcgggt gaggcgacgg tcatgggaaa aaatcctagt ccaatgaaaa gtaacgattg
121321 aggctaattt taccctctg gggaacacca gataatcccc tattctgcca ttaaaaaaga
121381 ttgagaaaaa gctatggctg ctcaatcccc atctttatgg tttccttgcc cctaataatc
121441 cctcactaaa gctccggcaa gtttggggga ctttaaatct tattttcccc ccaaaaaaaa
121501 tttggggggc cagggggggt tttaaaacag gctctaggcg gcggagggtt gcagacattt
121561 gatgatggaa gctttttcca ataactccac cacttctccc gaagggttga ccacaaaaag
121621 ttccgacagt ttctgttgat ctaacaactg ggccacttca aacaaagatt gattggcgtt
121681 aacggtgacc atctgttggg gatactgcat caagctatcc actgtgacct ggggccaatc
121741 ggaagtgggg acgtgtttga tgtcttccgt agcaagtaca cctaacagtt gattgtcggc
121801 accaataacc aagaaccgct gccagggggt tttaaccaat acataatcgt tagcaaatc
121861 ccgaatatatt aaccggcag gaataatggg gctgttggga ataaccgat cttcagcagt
121921 aaaggcttcc atttgctctt tggtccagaa gttgcggcg gaggaaccag cattttgtaa
121981 caggaaccac ccgatcaaaa tgggtccagaa gctaccgatg ggcagaatat ttaaaatacc
122041 taagctacca atggcgatcg ccaaccaacc gaaaccctgg cccaccgcag tagcaatgag
122101 aatacctttg ttttgattgc ccgtgatttg ccacacaatg gatttgagca cattgcgcgc
122161 gtccaaaggt aaaccaggaa tgagggttaa caatgccagg gcgaggttga tcatgcccac
122221 taaaccaatg atggcctgcc ccggcacagg tagggggatt tgggtacca ctatgggtta
122281 acccaaaaaag agcactaaac tcaccgcccg cccggcgatc gccaccgcaa aagcttgcca
122341 gggagtgttg gattcctttt ctaaaactcg tagaccaccg aacaaaaaca gagttaggga
122401 ttttaacttca atgcccctgg ctaaggcaac caaactatgg cccaactcgt gggcgacaac
122461 ggaagcaaaag aggagtaaag ctgtaattaa ccccaaaatc cagggtgtgc caccggaaaag
122521 ttggggaaaag cgggctaagt cttggccata gctcagggtc accaatccta aaattaaaaa
122581 ccaggatggg ttgacgtaaa aaggaaatgcc aaacagactg ccgacgcgga tattgttggt
122641 cataaactgc ccccttaaac tgaggcttaa catgaattaa ttgtaacgag atgttaagaa
122701 ttgcctgagt gggataaccg tgggggttag ttcggttaa cactttccc ccaatccacc
122761 gtaggatcta gtcaacaggc ctccctccc gttacttgc ccatgttttc cccagcgtt
122821 tactcagaaa ttatcgctac cctccccccc agtgtaagg tgggtggcgtt aacaaaaacc
122881 aagggcgatc ccgacatcga agcggcctac ggagcgggca tccgggattt tgcgaaaagt
122941 cgcctccaag aagctttacc aaaaatcgaa gctttagcaa attaccaaga tattaactgg
123001 cattttatcg gacgtttaca gagtaacaag gcccgcaaa tgggtggaaa ttttacctat
123061 atccattccg ttgataattt ggcgatcgcc gtcaaaactg accgcattgc tgaggagtg
123121 aacaaatttc cccagggtt attacaatc aagttactgc cggacgagaa taaatccggt
123181 tggacaaggg aagaattaaa gctggatttg cccaactgg agctattaaa aaatctaaaa
123241 atttgtggct taatgactat ttacccttg ggtctttccc ctggcgatcg ccaactaacc
123301 tttgggggac taaaaaatct ggccacagcc atcaaccaac aatctagcct gtcattaacg
123361 gaactatcca tgggcatgtc cggagattac ccagaagcca ttgccgcgg agctaccatg
123421 atccgcttgg gtaccattct ctttggcgat cgactctaaa ctatactccc gcccataaca
123481 aagagactcc ataattttta aacattgaat ctgcactaat tagcagcata ttttctgttt
123541 gtgcctgggc aatgataatt ctgtcaaacg gatcacgggt atgtaggggc aatgtcgcaa
123601 cttgcagggc atggcgggtt ttaatgtcca ggaactcagc acccaatttc accatgcgac
123661 tgagaatgta gtcgtcaata ttttctggca agggcagttt accgatggaa gtcttaattg
123721 acatttccca aatactggca acagaaagcc atatttcgtt ccataaccag cactgggtat
123781 aaattgcatc ttcgttcaat ttttccggct cagtaaacca caaatatcat ttggtaaaag
123841 ccaacaaaag tttcacgtta atccttctca agataatggc ccaaatatcat ttggtaaaag
123901 atcggttaag tcacttgcca ctacaaataa tctcogactt acccctaagc tggagcatcg
123961 atccacggat ttttgctttt gcagagggaac caacttagca atgggaatac cctggctcagc

124021 aacgatgact tcttccca gcttgatact gtacaaaagc tcagga tgaattctat
124081 ttgggtcaaca ttgacgggtc ccatagtggg tcttagtttc tctggattca cgttactcc
124141 gatcatagct tgctctcacc ggaatttatt tgacggcacc agaatatgag taaa aaatg
124201 gggatcgccg ttactttaac tagctctgtg gacaatggca aaggcgggaag tgtaaccgtg
124261 taaaaagggtc ttgacacca cctggccaat ttctccatta caaaagaaac caccacgggc
124321 tactccagga aaatattgcc caaacatctg gctatcaaaa ttgggggtac catacaggcc
124381 atagcctctg cccaaacagg aaaacatcaa tgccccgatc gccgtagaag aagattgatt
124441 agcctctcct tcgggtgtaat ggcgcaaaag aatttgtaag tcgtcggcgg aagtttcccg
124501 gtccccgaaa tgggaattgta acctttgccc ctcttcacc cggctccaa tggcgatcg
124561 cccctggcgg ggatccacc ccagtaagtt ccacccccc aaaaaggga ctttgggcca attcctgatc
124621 taatttaaat tcatcgctgg ccacccccc tcagtttctg caggctagcc aggggcgttt ccaacaccac
124681 tttgggactg aggggtggaa tcagtttctg ctctgtaatg atatttctct gccctgggtt
124741 cgtgccactg tctgcatcct taccttggat ttctgtaatg accacactac cgagcgaat
124801 aaccacaaag ggttcgcca taggcgcaca gccctggcc accacactac cgagcgaat
124861 attgcccgtc aagggtacgc cgataaaaac atctccataa cggccagcgg gatgatcaga
124921 agattgcaaa aataaactgc cccccatggc cacattttcc ccactggcta agccaccac
124981 ttttgttgct tggggatagg caaaatccaa cccggctaaa aagtctgtga tgccccagt
125041 catcgggtcg gccagaataa taaaatctgc gccactggcc ggatcaacc ccattaaatc
125101 caccacaactt tggggcgggtg cgtctaaatc gggcattcct tccccatgga catagaatgg
125161 cgtcacccgtc acccctggca attggggccc cgttaagctc aatggcactt ctcttctac
125221 ttctctgact gtggcattgt ttccactgcc cttgcactag gggcattaac cgggcgcgat
125281 attcggtaact gacaactttt cttgcactag gggcattaac cgggcgcgat
125341 cctggaggaa aggaagataa tcgccaagtc ccattgtccc tgacccccc ccttggcgat
125401 cgctcaccac aatgcccctc ccagggtagg tctggtagaa agagcattaa cccacggcag
125461 agaattgtgtc ataggagaaa aaagtaatg aggtgctcga cgggatggca aaggttaaca
125521 aaaaccttgc ccaaaagtag gactggcgta gactaccatc gtaacttctc agatcaaat
125581 gcagaaaatc agcgacaaaa aatctcccct gccccaaat tactgtcccc attccctttg
125641 ctaacattatg gcaaaatgat gaaggcctaa cagtaaaact cctcccatga ccacttccct
125701 ccgcccccaa tatgaaccca ccgtcaccca agccaaatgg caaacagcgt ggggaagaaag
125761 tcatgccttt aaagccgatc ccgatcgccc aggggaaccc tattgcgtgg tgattcgcc
125821 ccccaatgtg acaggtagtt tgcataatgg ccacgtttt gagagttctt taatcgatac
125881 tttgggttctg tatcacccga tcggggggga caataccctc tgggtaccgg gaacggacca
125941 tgccagttatt gctgtgcaaa ccatttttga acgtcagtta aaagcggagg ggaacacgag
126001 ggaatgattt ggccgggaaa agtttttggg acgggcctgg caatggaaag cggagtccgg
126061 cagtactatt gttaaccaac tgccggcgtt gggagtgtct gtggactgga ccagggagcg
126121 gttcaccatg gatgaaggac ttccccaagc agtaaaaaaca gcatttatta agttgtacga
126181 agaaggatta atttacccgg gtaattatct ggtcaattgg tgccggctt cccagtacgc
126241 ggtgtcggat ttggaagtgg aaaaccagga agtggaacgg catttgtgg attttcgtta
126301 tccccaccac gacggtagtg gagaactagt ggtggccacc acccgaccgg aaaccatgct
126361 ggggggatac ggggtggcgg ttaatcccca tgatgaacgc tatgccgcca tgggtgggcaa
126421 aaccattacc ctacctttag tgaaccggga aattcccat gtggccgatg agttggtgga
126481 cccagaattt ggtaccggct gtgtgaaggt tacccccgc cagcatccca acgatattgt
126541 catggggcaa cggcacattt tacttttat ctggccaaga ccgctttgaa gcccgcacaa atgtgtgca
126601 tgagaatggg ggggattttg gcccagggtt ttctgggtcaa aattgaaccc tatcgtcatt ccgtaccta
126661 agccctagaa gcccagggtt ccgtggaacc gttgttatcc acccaatgg gataacccc ctaattttgt
126721 cggcgctcgg ggttaagggtc ccccaaaatg cccctggcctg tttggacgag gataacccc atgtgtgtat
126781 tgaaagccta gcccaaaatg cccctggcctg tttggacgag gataacccc atgtgtgtat
126841 gccggaacgg tggggtaagg tttatcgaga ctggttggtg aagctcaaaag atgtgtgtat
126901 ttcccggcaa ctgtggtggg gtcatacaat tcccgttgg tatgtgatca gcgaaaccaa
126961 tggagccata actgatcaca cccctttcat tgtggcctac gacgaggccg aagccttagc
127021 taaagcgaaa gcagaatatg gcccgacggg gcaattgcaa caggacccc atgtgttgg
127081 tacctgggtt tcttcgggac tgtggccctt ttccaccatg ggctggccag acaaacaga
127141 cgatttggtc aaatattatc ccaccagcac cctagtaacg ggttttgaca ttactttt
127201 ctgggtggcc aggatgacca tgatggcggg gcacttcacc ggccaaatac cctttaagga
127261 tgtctatate cacggcttgg tcggggatga aaatggtaaa aaaatgtcta aatcgccaa
127321 caacggcatt gatcctttgt tgttgattaa taaatatgg accgatgcgc tacgttacac
127381 cctaattcgg gaagtggctg gagcggggca agatattagc ctgcaatacg atcgccagaa
127441 ggatgaatcg gagtccgtgg aagcgtccc taactttgcc aataaactgt ggaatgcggc
127501 ccggtttgtg atgatgaatc tggatggtea gaccccgag caattgggtc tagccctgg
127561 ggaagattta gaattggcag accgttggat tctctccgt aggggaagcg tgaatcaag
127621 aactcgagag caaattgaag attacggcct aggggaagcg gccaaaggcc tgtacgaatt
127681 catctgggtg gatttttgcg attggtacat tgagctagct aaaccagac tctggaataa
127741 ggaaggagga gacgtcgga cccagcgtca attggtggcc cgccaagttt tggccacac
127801 gttggacagc attattaagt tgctccatcc ctttatggcc catattacgg aggaagctgtg
127861 gcaaaactct caccaggcgg aaggacaatt tttggcttgg caggcctacc caacgggtta
127921 ccaattcctta gttgaccag ctttggaac ttagtttgc ctgttaattg aaactctccg
127981 caccatccgt aatctccggg cagaagctgg cattaaaccg ggagccatgg tcaactgtat
128041 cctccaaagt gaaaatgacc aggaacgaca aaccctccag ctaggagaaa cctatattcg
128101 ggacattggc aaagtggaaa atctccaaat ggtgtcccaa ctacctccag acaaaaccca
128161 ggcgatcgcc ggtgtgggtg atacaattca ggtgtcatt cccctatccg ggcagtggg
128221 tttggatatt ctccgcaata aaatccaaaa aaccttggat aaagtgacca aagaatatta

128231 aagcatcgaa aadggcotta gcaatccggg ttttggtaat aagccccag aggaagtgat
128341 cggcgagct aaggaatcc ccaatgccc cgtgttcaa cggcaaatgc tccaggagcg
128401 acctaaaatg ttgggctaaa aaagcttgtg atgccccctc agaccaatct ttggatcaaa
128461 atagagcacc actccagct tatctatcgt taccaccaa aagcttgttt aaaaagccac
128521 aatccgcccc ctataatccc tcaactaacc gtcggcaaat ttggcagact ttgaacactg
128581 tccccccag agttgggggg ctaggggggg ttttaaaaca ctttataatc ctgatattct
128641 ctaccacttc aggagattga attgttccat atcggttgtt tcccggttgc ggtataatggc
128701 tagcacgac gccagaccca cagcggcttc ggcggcgcca atggtaatga caaaaatggc
128761 aaacacctgg ccccgaaatg ttgagcaata gttcaatgga catcaacacc cgcaccgcac tacggctagt
128821 gttaactgcg ttgagcaata tgcaaaagag ggcggcgctc aggatcaaac aatattgaag
128881 gatgagacca taaatgccaa aagagaaatt taactagagt tatgaataaa accgtaaata
128941 ctgcaaatgc atagtggggg atttttgcct aagttttgct caatttaacc gcaagattga
129001 aaattagggt agggcggaag tctatttgga agcggaggtt aactcccggt
129061 agaagctgcc actaacctac ctaggcgaca ttttgttttc ctcggaacat tccgggaatta
129121 gacgctctgg caaagtcagg cccgtggcgg ccattggccat caatagcaga acggaagcca
129181 agtcccgacg ggccaaaata tcaactaaaa agtgtttgct aatgggtgact aggggtgttt
129241 actcaaaagg caaaaggtaa ttaatctgcc aggggggtgat caacaccatg gtgctcaaca
129301 ccacaaaagg ccccgtttca accagagcag tggaacattt tcttagccaa cgaccgggaa
129361 gggcaaaagt gccggtacat ttattgacca acataatggc aaaaagaata agtacactga
129421 ttttggaaaa atcctcccggt acttggggcg cgcacaaaa atccgcattg agcagaatat
129481 ctgcccccac gtaaaactagc aaaactcccc ccaataggaa ggcagaataa acaatattag
129541 aaataccgga aatactgagg gcccggccaa tgactaaaaa agccaggatt aggaaggata
129601 agagcagtac gacccccagg aaatttcacg tggttaattc taacgggtaa agccaaggaa
129661 tgtactgaac accttcagct gagtttactt ttttgggtaa agccaaggaa taaatcatca
129721 gggcaaaatt ggttcacaac ctttcaccaa tctttggggt tgttgcggc cccgttgact
129781 acctattctg ctttcaccaa tctttggggt aagtagccta gttcccgcag gggagtcacc
129841 aaattgtggg gttctattac tctttggggt atagggcaac cttcccaaag ccacgttgct
129901 atgggggtct cataggccgc caattcatat tctcgggtca tggagaggga gttgtggga
129961 tcatggcgat cgcaattacc gcagaaaaata cctacaccga agtcgatgct gtaatgttg
130021 cagtactcca ccaattacc cttatataat tcccagtcga ctacgggcaa gttaatggga
130081 agttcttttt tcttaactgc acaggcaata catttatcaa actcaaaatg aattctgccc
130141 caaaccgcga cacagacttc gagcttttcg tagggatatt gcaccgtgat gggccgacga
130201 cggaatcggt ctgagggaat tgctaacccc tgaccgatat acttagccgc ttgcaagctc
130261 ctcatgtggg caaaggtaac ctgtttgaga atgttgtaa acatagattt gggattggga
130321 tcttttagcgt aatgcctac taagtcggcc aaagttagaa gctgggctaa gacaaatttc
130381 taagcaaatg attaaagggt aggttgggag aggactaacc gccaaaggcc atgggaaagg
130441 agtgacatcc cagctaattc atgagaagggt ttgctagggc aacgggcaat aaaaatttcc
130501 tcaatttcag ggcggcagtg atgagaagggt tgcctagggc tgcctagggc agcaaaatag
130561 aacccaagtt taacaattgg tcaatacgcg cctggggcac tgcctagggc gataccgagg
130621 caatgaagat gaggaatag gacttcagca cctccagcca attggccaca ttttccaggg
130681 gcacctgcaa ccagggaagt gtaggggcaa cccagataaa taccaggga gaaagtacaa
130741 gaatggggaa gtcccaaccg cccagataaa cgaatttcac cccagcatat tccggttgat
130801 gggttaacgta ggagccaagg tagaacagggt gtaggtcaaa gggtagtcgc tcacattccg
130861 agcctgttac caattcttct tccgcttcgc gtaggtcaaa cccggggttg cgcgcaata
130921 ccaaggctgc aatccagaaa atcagaaagc tggcaacga tgcgatggt gctgaggctg ttagaccatc
130981 aaatgccgta accggactgt agggaaagggt gaatttcgta gctaattggac tgggctgccg
131041 tcacgatcgc caacacggcc gaatacttat tattggaagc ataaccagac atcaacaacc
131101 cccggagacc ccccaaaagg aatactggaa agggcaatcc agagaaaaat accaacgtta
131161 cgatgggagc aatactggaa ggcacgatga gataggaaag aaaaaccggc agtaccacca
131221 tgaccaagtt ctggccgaag aaccaggggt cagccttggc ggggtactaca tcttctttga
131281 gtacaggggc gatgccatcg gccacggggt gtaacacccc taaaggacct gcgtattctg
131341 atactagctt ttgttgagcg gcggcggaat tctttcttct cagccacacc accaccaaca
131401 gcccattcct agctccgatg atcatcaaaa tggaggggag gggaaatcaa aacagcttcg
131461 ccccgacggt gggcaggcca aaaccttggg gtgactgaag aaaactattc tgaagatcaa
131521 ctaatcctgg catggtgccg tccgctggga ggggtgaaat gattaactga gtctcagctc
131581 tgctgaagt ccgattattg taatgaaatt tacctgctta gtatagtcac aatagtttg
131641 agcaagcttg ttagaattct tgaagggtat agctctcttg gggctcgggtg tgcctcgtt
131701 atgggtatga cttcaagatc cctagggttt tttccctacc ctgggcagcc ctctagtaac
131761 cttcaagatc cctagggttt tttccctacc ctgggcagcc ctctagtaac cagtcctgcc
131821 cctatcaaaa cttccttttg ccgcccctag ttgcgttttg cccgttctct ctatccccgt
131881 atcttatccg taacccaaaag tgatccggaa agggggccatc aacggcttat tcaaaactta
131941 aagaaagtgg ataccatgca tgcgaatggg tttgctgtgg ccattggagca actggagcaa
132001 gctttttacc atgcagaccc tgcgtttaca caaacctgtt ggggcttaaa ttttcccaat
132061 gtgcttggtc tatcggtcgg ctgtgataag gaggggggag cggccg

//

